## Basic Survey (Radiation Dose Estimates) Reported on 25 December 2014

## 1. Response Rates and Radiation Dose Estimates

### 1.1 Response Rates of Residents

The overall effective response rate to the Basic Survey (radiation dose estimates), which targeted the entire population of Fukushima Prefecture, was $26.9 \%$ ( $553,418 / 2,055,383$ ) as of 31 October 2014. Response rate of the simplified questionnaire was $3.1 \%$ ( $62,805 / 2,055,383$ ). (See Table 1)

| Table 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Response rates to the Basic Survey |  |  |  |
| As of 31 October 2014 |  |  |  |
| Target population |  | 2,055,383 | $\square$ |
| Response | Original questionnaire | 490,613 | 23.9\% |
|  | Simplified questionnaire* | 62,805 | 3.1\% |
|  | Total | 553,418 | 26.9\% |

*Preliminary figures
Fractions have been rounded.

The following tables show the results of the original and simplified questionnaires combined.

Since we started providing the simplified questionnaire around a year ago, the response rates have increased especially in the areas where the proportion had been low. In Minami-aizu, the increase was $6.6 \%$ (from 13.4 to 20.0\%). (See Table 2)

| Table 2 Response rates by area |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kempoku | Kenchu | Kennan | Aizu | Minami-aizu | Soso | Iwaki | Total |
| 30 Sept. 2013 (a) | 26.5\% | 20.9\% | 17.6\% | 15.1\% | 13.4\% | 44.4\% | 21.9\% | 23.6\% |
| 31 Oct. 2014 (b) | 29.8\% | 23.7\% | 21.9\% | 20.9\% | 20.0\% | 45.4\% | 25.0\% | 26.9\% |
| Difference (b-a) | 3.3\% | 2.8\% | 4.3\% | 5.8\% | 6.6\% | 1.0\% | 3.1\% | 3.3\% |

### 1.2 Radiation Dose Estimates

Doses have been estimated for 531,691 of 553,418 respondents (96.1\%) as of 31 October 2014, and the results have been returned to 512,194 respondents (Table 3).

| Table 3 | Response rates to the Basic Survey |  |  |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area(preceding and full-scale surveys) | Target population | Response | Response rates $\mathrm{c}=\mathrm{b} / \mathrm{a}$ | Completed dose estimation | Proportion $\mathrm{e}=\mathrm{d} / \mathrm{b}$ | Returned results <br> f | Proportion $g=f / b$ |
| Kempoku | 504,062 | 150,123 | 29.8\% | 144,637 | 96.3\% | 140,301 | 93.5\% |
| Kenchu | 557,266 | 131,995 | 23.7\% | 127,871 | 96.9\% | 123,944 | 93.9\% |
| Kennan | 152,229 | 33,362 | 21.9\% | 31,969 | 95.8\% | 29,868 | 89.5\% |
| Aizu | 267,205 | 55,891 | 20.9\% | 52,542 | 94.0\% | 47,532 | 85.0\% |
| Minami-aizu | 30,787 | 6,169 | 20.0\% | 5,736 | 93.0\% | 4,999 | 81.0\% |
| Soso | 195,608 | 88,895 | 45.4\% | 86,156 | 96.9\% | 85,536 | 96.2\% |
| lwaki | 348,226 | 86,983 | 25.0\% | 82,780 | 95.2\% | 80,014 | 92.0\% |
| Total | 2,055,383 | 553,418 | 26.9\% | 531,691 | 96.1\% | 512,194 | 92.6\% |

Including Yamakiya of Kawamata, Namie and litate.

We have been estimating doses for non-residents who were visiting or staying in Fukushima Prefecture at the time of the accident (Table 4).

| Table 4 | Response rates to the Basic Survey |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Visitors) |  |  |  | As of 31 October 2014 |  |
|  | Responses | Response rate | Completed dose estimates | Proportion | Returned results | Proportion |
| a | b | $\mathrm{c}=\mathrm{b} / \mathrm{a}$ | d | $e=d / b$ | f | $g=f / b$ |
| 3,858 | 2,125 | 55.1\% | 1,869 | 88.0\% | 1,864 | 87.7\% |

## 2. Results of Radiation Dose Estimates

Table 5 shows the numbers of completed dose estimates (see Table 3) -excluding the data in the estimation period less than four months-within a range of values.
Radiation doses for a total of 453,183 residents have been estimated to date. The results for 444,362 respondents (excluding radiation workers) suggest that the doses for about $87 \%$ of the respondents in Kempoku area and about $92 \%$ in Kenchu area were $<2 \mathrm{mSv}$. The doses for approximately $88 \%$ of the respondents in Kennan area and more than $99 \%$ of those in Aizu and Minami-aizu areas were <1 mSv . Doses for about $78 \%$ of respondents in the Soso area and more than $99 \%$ of respondents in Iwaki were also <1 mSv.


## 3. Evaluation of the results

The latest effective radiation dose estimates showed similar trends to those observed so far. Since previous epidemiological studies ${ }^{1}$ indicate no significant health effects at doses $\leq 100 \mathrm{mSv}$, we concluded that radiation doses estimated so far are unlikely to cause adverse effects on health, although this conclusion is based on external radiation doses estimated only for the first four months following the accident.

## References

1) Sources and effects of ionizing radiation, United Nations Scientific Committee on the Effects of Atomic Radiation, UNSCEAR 2008 Report to the General Assembly, with scientific annexes.


# Survey on the representativeness of dose distribution shown in the Basic Survey (Tentative plan) 

## 1. Background and Purpose

At the $16^{\text {th }}$ Prefectural Oversight Committee Meeting for the Fukushima Health Management Survey, questions were raised about whether people who have responded to the Basic Survey represent the whole population in regard to external dose estimates and dose distribution. To answer this, we will investigate how the dose distribution of as yet nonrespondents compares with respondents on a geographic area-by-area basis.

## 2. Survey Population

We plan to use a two-stage sampling method based on nationwide and prefecture-wide polls. ${ }^{1}$ As a first step, we will randomly select geographic areas for polling, with special weight given to evacuation zones. In the next step, we will randomly select a total of around 4,000 to 5,000 samples throughout the prefecture.

## 3. Methods

After reviewing the responses, we will visit nonrespondents to conduct a series of questions starting in early fiscal (FY) 2015. ${ }^{2}$ To meet the need for a large workforce, we will outsource and hire polltakers who will visit nonrespondents to support filling out the questionnaires. This enables us to ask them why they did not answer the questionnaire, and encourage their cooperation. If they are not home, a polltaker will visit them again to raise the response rates. This door-to-door survey should be completed by the end of FY 2015.

## 4. Results

We will estimate the doses for all respondents. By comparing the dose distribution of the respondents from the door-to-door survey and those who responded previously by mail, we will find out if what has already been reported is an accurate and unbiased assessment of dose distribution for the whole population of Fukushima Prefecture.
Reasons gathered from the respondents for not answering the questionnaire will be categorized and tallied to guide how the instructions for filling out the questionnaire and the Basic Survey might be improved.

1) The cabinet office typically selects 3,000 to 10,000 samples for a nationwide poll.
2) Japan's fiscal and academic year begins April 1.

Response rates to the Basic Survey by district

| ceding and full-scale surveys |  |  |  |  |  | of 31 October 2014 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | District | Target population | Response ${ }^{\text {b }}$ | Response rates $c=b / a$ | Completed dose estimation d |  | Returned results f | Proportion $g=f / b$ |
| Kempoku | Fukushima | 295,654 | 93,181 | 31.5\% | 90,040 | 96.6\% | 87,076 | 93.4\% |
|  | Nihonmatsu | 60,859 | 16,247 | 26.7\% | 15,653 | 96.3\% | 15,258 | 93.9\% |
|  | Date | 67,581 | 18,156 | 26.9\% | 17,447 | 96.1\% | 16,927 | 93.2\% |
|  | Motomiya | 31,766 | 8,711 | 27.4\% | 8,194 | 94.1\% | 7,964 | 91.4\% |
|  | Kori | 13,207 | 3,866 | 29.3\% | 3,739 | 96.7\% | 3,662 | 94.7\% |
|  | Kunimi | 10,316 | 2,976 | 28.8\% | 2,862 | 96.2\% | 2,802 | 94.2\% |
|  | Kawamata | 15,886 | 5,083 | 32.0\% | 4,889 | 96.2\% | 4,856 | 95.5\% |
|  | Otama | 8,793 | 1,903 | 21.6\% | 1,813 | 95.3\% | 1,756 | 92.3\% |
|  | Subtotal | 504,062 | 150,123 | 29.8\% | 144,637 | 96.3\% | 140,301 | 93.5\% |
| Kenchu | Koriyama | 339,736 | 83,992 | 24.7\% | 81,587 | 97.1\% | 78,967 | 94.0\% |
|  | Sukagawa | 80,162 | 16,642 | 20.8\% | 16,037 | 96.4\% | 15,541 | 93.4\% |
|  | Tamura | 41,726 | 10,012 | 24.0\% | 9,594 | 95.8\% | 9,436 | 94.2\% |
|  | Kagamiishi | 13,109 | 2,851 | 21.7\% | 2,770 | 97.2\% | 2,690 | 94.4\% |
|  | Tenei | 6,469 | 1,169 | 18.1\% | 1,131 | 96.7\% | 1,005 | 86.0\% |
|  | Ishikawa | 17,490 | 4,156 | 23.8\% | 4,023 | 96.8\% | 3,917 | 94.2\% |
|  | Tamakawa | 7,338 | 1,468 | 20.0\% | 1,417 | 96.5\% | 1,380 | 94.0\% |
|  | Hirata | 7,057 | 1,630 | 23.1\% | 1,563 | 95.9\% | 1,522 | 93.4\% |
|  | Asakawa | 7,163 | 1,476 | 20.6\% | 1,433 | 97.1\% | 1,385 | 93.8\% |
|  | Furudono | 6,319 | 1,296 | 20.5\% | 1,247 | 96.2\% | 1,219 | 94.1\% |
|  | Miharu | 18,994 | 4,766 | 25.1\% | 4,620 | 96.9\% | 4,525 | 94.9\% |
|  | Ono | 11,703 | 2,537 | 21.7\% | 2,449 | 96.5\% | 2,357 | 92.9\% |
|  | Subtotal | 557,266 | 131,995 | 23.7\% | 127,871 | 96.9\% | 123,944 | 93.9\% |
| Kennan | Shirakawa | 65,428 | 14,846 | 22.7\% | 14,100 | 95.0\% | 12,793 | 86.2\% |
|  | Nishigo | 20,091 | 4,797 | 23.9\% | 4,637 | 96.7\% | 4,470 | 93.2\% |
|  | Izumizaki | 6,931 | 1,315 | 19.0\% | 1,269 | 96.5\% | 1,215 | 92.4\% |
|  | Nakajima | 5,306 | 964 | 18.2\% | 928 | 96.3\% | 881 | 91.4\% |
|  | Yabuki | 18,343 | 4,017 | 21.9\% | 3,887 | 96.8\% | 3,741 | 93.1\% |
|  | Tanagura | 15,383 | 2,935 | 19.1\% | 2,841 | 96.8\% | 2,727 | 92.9\% |
|  | Yamatsuri | 6,489 | 1,434 | 22.1\% | 1,374 | 95.8\% | 1,332 | 92.9\% |
|  | Hanawa | 10,062 | 2,259 | 22.5\% | 2,170 | 96.1\% | 1,966 | 87.0\% |
|  | Samegawa | 4,196 | 795 | 18.9\% | 763 | 96.0\% | 743 | 93.5\% |
|  | Subtotal | 152,229 | 33,362 | 21.9\% | 31,969 | 95.8\% | 29,868 | 89.5\% |
| Aizu | Aizuwakamatsu | 127,815 | 28,934 | 22.6\% | 27,322 | 94.4\% | 24,598 | 85.0\% |
|  | Kitakata | 53,201 | 10,139 | 19.1\% | 9,326 | 92.0\% | 8,003 | 78.9\% |
|  | Kitashiobara | 3,275 | 595 | 18.2\% | 563 | 94.6\% | 516 | 86.7\% |
|  | Nishiaizu | 7,725 | 1,432 | 18.5\% | 1,327 | 92.7\% | 1,243 | 86.8\% |
|  | Bandai | 3,888 | 752 | 19.3\% | 730 | 97.1\% | 679 | 90.3\% |
|  | Inawashiro | 16,272 | 3,580 | 22.0\% | 3,410 | 95.3\% | 3,250 | 90.8\% |
|  | Aizubange | 17,881 | 3,202 | 17.9\% | 3,025 | 94.5\% | 2,809 | 87.7\% |
|  | Yugawa | 3,514 | 705 | 20.1\% | 670 | 95.0\% | 606 | 86.0\% |
|  | Yanaizu | 4,077 | 710 | 17.4\% | 672 | 94.6\% | 626 | 88.2\% |
|  | Mishima | 2,031 | 372 | 18.3\% | 336 | 90.3\% | 319 | 85.8\% |
|  | Kaneyama | 2,544 | 619 | 24.3\% | 560 | 90.5\% | 547 | 88.4\% |
|  | Showa | 1,569 | 344 | 21.9\% | 317 | 92.2\% | 313 | 91.0\% |
|  | Aizumisato | 23,413 | 4,507 | 19.2\% | 4,284 | 95.1\% | 4,023 | 89.3\% |
|  | Subtotal | 267,205 | 55,891 | 20.9\% | 52,542 | 94.0\% | 47,532 | 85.0\% |
| Minami-aizu | Shimogo | 6,650 | 1,215 | 18.3\% | 1,146 | 94.3\% | 1,072 | 88.2\% |
|  | Hinoemata | 614 | 142 | 23.1\% | 130 | 91.5\% | 130 | 91.5\% |
|  | Tadami | 5,030 | 1,083 | 21.5\% | 1,014 | 93.6\% | 951 | 87.8\% |
|  | Minami-aizu | 18,493 | 3,729 | 20.2\% | 3,446 | 92.4\% | 2,846 | 76.3\% |
|  | Subtotal | 30,787 | 6,169 | 20.0\% | 5,736 | 93.0\% | 4,999 | 81.0\% |
| Soso | Soma | 37,371 | 12,988 | 34.8\% | 12,444 | 95.8\% | 12,294 | 94.7\% |
|  | Minami-soma | 70,012 | 29,822 | 42.6\% | 29,026 | 97.3\% | 28,760 | 96.4\% |
|  | Hirono | 5,165 | 2,197 | 42.5\% | 2,115 | 96.3\% | 2,091 | 95.2\% |
|  | Naraha | 7,963 | 4,137 | 52.0\% | 3,971 | 96.0\% | 3,940 | 95.2\% |
|  | Tomioka | 15,753 | 8,561 | 54.3\% | 8,357 | 97.6\% | 8,327 | 97.3\% |
|  | Kawauchi | 2,996 | 1,519 | 50.7\% | 1,472 | 96.9\% | 1,463 | 96.3\% |
|  | Okuma | 11,476 | 6,009 | 52.4\% | 5,768 | 96.0\% | 5,732 | 95.4\% |
|  | Futaba | 7,051 | 3,915 | 55.5\% | 3,813 | 97.4\% | 3,803 | 97.1\% |
|  | Namie | 21,333 | 12,868 | 60.3\% | 12,591 | 97.8\% | 12,571 | 97.7\% |
|  | Katsurao | 1,541 | 811 | 52.6\% | 756 | 93.2\% | 750 | 92.5\% |
|  | Shinchi | 8,357 | 2,652 | 31.7\% | 2,539 | 95.7\% | 2,509 | 94.6\% |
|  | litate | 6,590 | 3,416 | 51.8\% | 3,304 | 96.7\% | 3,296 | 96.5\% |
|  | Subtotal | 195,608 | 88,895 | 45.4\% | 86,156 | 96.9\% | 85,536 | 96.2\% |
| Iwaki | Iwaki | 348,226 | 86,983 | 25.0\% | 82,780 | 95.2\% | 80,014 | 92.0\% |
| Total |  | 2,055,383 | 553,418 | 26.9\% | 531,691 | 96.1\% | 512,194 | 92.6\% |

*Including Yamakiya of Kawamata, Namie and litate.

Estimated external radiation doses in the first four months (from 11 March through 11 July)
Preceding Survey and full-scale survey
As of 31 October 2014

## Estimated external radiation doses by region



Percentages have been rounded and may not total to $100 \%$.


Estimated external radiation dose by age group (excluding radiation workers)

| $\begin{aligned} & \text { Effective } \\ & \text { Dose } \\ & (\mathrm{mSv}) \end{aligned}$ | Age at the time of the disaster |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | $80-$ |  |
| <1 | 45,801 | 41,874 | 20,221 | 32,386 | 27,318 | 31,588 | 35,063 | 25,019 | 16,957 | 276,227 |
| 1-2 | 21,680 | 20,362 | 9,569 | 17,339 | 16,091 | 18,133 | 18,966 | 11,986 | 6,877 | 141,003 |
| 2-3 | 5,975 | 3,962 | 1,057 | 2,203 | 2,137 | 2,867 | 3,299 | 1,935 | 826 | 24,261 |
| 3-4 | 239 | 156 | 78 | 150 | 144 | 227 | 221 | 159 | 67 | 1,441 |
| 4-5 | 19 | 45 | 36 | 40 | 76 | 90 | 77 | 72 | 39 | 494 |
| 5-6 | 13 | 14 | 27 | 33 | 43 | 83 | 73 | 63 | 27 | 376 |
| 6-7 | 4 | 5 | 11 | 21 | 25 | 44 | 51 | 44 | 21 | 226 |
| 7-8 | 3 | 6 | 7 | 8 | 13 | 34 | 22 | 14 | 7 | 114 |
| 8-9 | 2 | 4 | 3 | 8 | 7 | 15 | 14 | 10 | 10 | 73 |
| 9-10 | 0 | 1 | 1 | 2 | 4 | 12 | 11 | 5 | 3 | 39 |
| 10-11 | 1 | 1 | 1 | 2 | 5 | 11 | 4 | 6 | 3 | 34 |
| 11-12 | 0 | 0 | 1 | 3 | 0 | 6 | 8 | 11 | 2 | 31 |
| 12-13 | 0 | 0 | 0 | 0 | 1 | 6 | 4 | 1 | 1 | 13 |
| 13-14 | 0 | 0 | 1 | 1 | 1 | 4 | 3 | 2 | 0 | 12 |
| 14-15 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 6 |
| $\geq 15$ | 0 | 0 | 0 | 0 | 2 | 2 | 5 | 1 | 2 | 12 |
| Total | 73,737 | 66,430 | 31,013 | 52,196 | 45,867 | 53,125 | 57,824 | 39,328 | 24,842 | 444,362 |

Estimated external radiation doses by sex in the first four months (excluding radiation workers)

| $\begin{aligned} & \text { Effective } \\ & \text { Dose } \\ & \text { ( mSv ) } \end{aligned}$ | By sex |  |  |  | Total | Proportion (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Proportion (\%) | Female | Proportion (\%) |  |  |
| <1 | 123,393 | 60.6 | 152,834 | 63.5 | 276,227 | 62.2 |
| 1-2 | 65,472 | 32.1 | 75,531 | 31.4 | 141,003 | 31.7 |
| 2-3 | 13,188 | 6.5 | 11,073 | 4.6 | 24,261 | 5.5 |
| 3-4 | 918 | 0.5 | 523 | 0.2 | 1,441 | 0.3 |
| 4-5 | 276 | 0.1 | 218 | 0.1 | 494 | 0.1 |
| 5-6 | 194 | 0.1 | 182 | 0.1 | 376 | 0.1 |
| 6-7 | 126 | 0.1 | 100 | 0.0 | 226 | 0.1 |
| 7-8 | 67 | 0.0 | 47 | 0.0 | 114 | 0.0 |
| 8-9 | 43 | 0.0 | 30 | 0.0 | 73 | 0.0 |
| 9-10 | 23 | 0.0 | 16 | 0.0 | 39 | 0.0 |
| 10-11 | 21 | 0.0 | 13 | 0.0 | 34 | 0.0 |
| 11-12 | 17 | 0.0 | 14 | 0.0 | 31 | 0.0 |
| 12-13 | 6 | 0.0 | 7 | 0.0 | 13 | 0.0 |
| 13-14 | 8 | 0.0 | 4 | 0.0 | 12 | 0.0 |
| 14-15 | 3 | 0.0 | 3 | 0.0 | 6 | 0.0 |
| $\geq 15$ | 9 | 0.0 | 3 | 0.0 | 12 | 0.0 |
| Total | 203,764 | 100.0 | 240,598 | 100.0 | 444,362 | 100.0 |

Percentages have been rounded and may not total to 100\%.

Estimated external radiation doses by region in the first four months (from 11 March through 11 July) excluding radiation workers

| Area/region |  | Effective Doses ( mSv ) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | <1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | 7-8 | 8-9 | 9-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | $\geq 15$ |  |
| Kempoku | Fukushima | 15,842 | 51,058 | 8,978 | 145 | 12 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76,049 |
|  | Nihonmatsu | 1,275 | 8,100 | 3,258 | 86 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,720 |
|  | Date | 4,300 | 8,825 | 1,113 | 145 | 8 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14,398 |
|  | Motomiya | 705 | 4,963 | 1,077 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,766 |
|  | Kori | 311 | 2,720 | 66 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,100 |
|  | Kunimi | 935 | 1,390 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,337 |
|  | Kawamata | 621 | 2,664 | 178 | 52 | 17 | 5 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3,541 |
|  | Otama | 379 | 1,016 | 128 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,525 |
| Kempoku Subtotal |  | 24,368 | 80,736 | 14,810 | 452 | 39 | 18 | 10 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 120,436 |
| Kenchu | Koriyama | 22,967 | 38,566 | 7,332 | 396 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69,270 |
|  | Sukagawa | 10,240 | 3,051 | 315 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,610 |
|  | Tamura | 7,122 | 651 | 22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,798 |
|  | Kagamiishi | 2,286 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,357 |
|  | Tenei | 366 | 543 | 52 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 962 |
|  | Ishikawa | 3,089 | 38 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,128 |
|  | Tamakawa | 1,142 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,162 |
|  | Hirata | 1,256 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,290 |
|  | Asakawa | 1,172 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,187 |
|  | Furudono | 1,032 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,048 |
|  | Miharu | 3,006 | 782 | 22 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,812 |
|  | Ono | 1,933 | 81 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,016 |
| Kenchu Subtotal |  | 55,611 | 43,863 | 7,751 | 406 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107,640 |
| Kennan | Shirakawa | 10,937 | 1,107 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12,051 |
|  | Nishigo | 2,136 | 1,844 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,982 |
|  | Izumizaki | 1,033 | 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,053 |
|  | Nakajima | 776 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 788 |
|  | Yabuki | 3,253 | 78 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,332 |
|  | Tanagura | 2,406 | 28 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,437 |
|  | Yamatsuri | 1,098 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,107 |
|  | Hanawa | 1,764 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,785 |
|  | Samegawa | 622 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 632 |
| Kennan Subtotal |  | 24,025 | 3,127 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27,167 |
| Aizu | Aizuwakamatsu | 22,373 | 144 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22,528 |
|  | Kitakata | 7,622 | 46 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,670 |
|  | Kitashiobara | 455 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 458 |
|  | Nishiaizu | 990 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 992 |
|  | Bandai | 615 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 625 |
|  | Inawashiro | 2,741 | 27 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,771 |
|  | Aizubange | 2,527 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,540 |
|  | Yugawa | 570 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 574 |
|  | Yanaizu | 529 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 533 |
|  | Mishima | 243 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 243 |
|  | Kaneyama | 393 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 395 |
|  | Showa | 235 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 236 |
|  | Aizumisato | 3,465 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,487 |
| Aizu Subtotal |  | 42,758 | 272 | 21 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43,052 |
| Minami-aizu | Shimogo | 917 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 922 |
|  | Hinoemata | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
|  | Tadami | 809 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 813 |
|  | Minami-aizu | 2,792 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,815 |
| Minami-aizu Subtotal |  | 4,618 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,650 |
| Soso | Soma | 9,702 | 439 | 86 | 20 | 5 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10,254 |
|  | Minami-soma | 18,826 | 6,096 | 502 | 96 | 35 | 3 | 6 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 25,570 |
|  | Hirono | 1,818 | 54 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,876 |
|  | Naraha | 3,351 | 127 | 13 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,495 |
|  | Tomioka | 5,785 | 1,098 | 98 | 18 | 3 | 2 | 0 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 7,010 |
|  | Kawauchi | 954 | 345 | 16 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,319 |
|  | Okuma | 3,318 | 1,263 | 109 | 17 | 6 | 4 | 4 | 3 | 0 | 2 | 2 | 1 | 0 | 4 | 0 | 1 | 4,734 |
|  | Futaba | 2,653 | 464 | 72 | 18 | 6 | 4 | 3 | 6 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 3,232 |
|  | Namie | 5,863 | 1,972 | 355 | 64 | 37 | 17 | 15 | 12 | 9 | 5 | 11 | 8 | 5 | 4 | 3 | 6 | 8,386 |
|  | Katsurao | 495 | 161 | 24 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 685 |
|  | Shinchi | 2,107 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,127 |
|  | litate | 196 | 323 | 360 | 339 | 357 | 321 | 184 | 84 | 57 | 29 | 21 | 17 | 8 | 4 | 3 | 4 | 2,307 |
| Soso Subtotal |  | 55,068 | 12,362 | 1,637 | 579 | 449 | 354 | 215 | 113 | 72 | 39 | 34 | 30 | 13 | 12 | 6 | 12 | 70,995 |
| Iwaki | Iwaki | 69,779 | 611 | 27 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70,422 |
| Total |  | 276,227 | 141,003 | 24,261 | 1,441 | 494 | 376 | 226 | 114 | 73 | 39 | 34 | 31 | 13 | 12 | 6 | 12 | 444,362 |
| Proportion (\%) |  | 62.2 | 31.7 | 5.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  |  | 93.9 |  | 5.8 |  | 0.2 |  | 0.1 |  | 0.0 |  | 0.0 |  | 0.0 |  | 0.0 |  | 100.0 |
|  |  | 99.8 |  |  |  |  | 0.2 |  |  |  |  | 0.0 |  |  |  |  | 0.0 | 100.0 |
|  | sitors | 1,321 | 264 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,605 |
| Total | +Visitors | 277,548 | 141,267 | 24,279 | 1,443 | 494 | 376 | 226 | 114 | 73 | 39 | 34 | 31 | 13 | 12 | 6 | 12 | 445,967 |

[^0]
## Interim Report of Thyroid Ultrasound Examination (Initial Screening)

Reported on 25 December 2014
Revised on 17 February and 5 June 2015

## 1. Summary

### 1.1 Purpose

One of the health problems caused by the Chernobyl nuclear power plant accident was thyroid cancer in childhood caused by internal exposure to radioactive iodine.
In response to the Tokyo Electric Power Company's (TEPCO's) Fukushima Daiichi nuclear accident, Fukushima Prefecture started a Thyroid Ultrasound Examination program to protect the health of children over their lifetimes. Initial Screening aims to check the baseline condition of participants' thyroid glands.

### 1.2 Group

Residents of Fukushima Prefecture, including visitors, as of 11 March 2011, aged 0-18 years (born between 2 April 1992 and 1 April 2011).

### 1.3 Implementation Period

The Initial Screening started from 9 October 2011 and was planned to end on 31 March 2014, but we continued these examinations until notice of the Full-scale Thyroid Screening program was sent to residents. The data tabulation period lasted to 31 October 2014.

We continue to conduct confirmatory testing on the basis of the primary test results.

### 1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University to conduct the survey in cooperation with institutions inside and outside Fukushima Prefecture.

We started the primary examination from 1 November 2012 outside Fukushima, and 92 institutions have agreed to cooperate as of 31 October 2014.

The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, and several institutions outside Fukushima Prefecture from November 2013. As of 31 October 2014, 25 institutions conduct the examination.

### 1.5 Method

## 1.5-1 Primary Examination

We used ultrasonography for examination of the thyroid gland.
Assessments were made by specialists on the basis of the following criteria.
-Diagnostic Criteria: A

Those with A1 and A2 test results were advised to take the next examination starting from April 2014.
(A1) No nodules / cysts
(A2) Nodules $\leq 5.0 \mathrm{~mm}$ or cysts $\leq 20.0 \mathrm{~mm}$
-Diagnostic Criteria: B
Those with B test result are advised to take the Confirmatory Examination.
(B) Nodules $\geq 5.1 \mathrm{~mm}$ or cysts $\geq 20.1 \mathrm{~mm}$

Some A2 test results may be classified as B results when clinically indicated.

## -Diagnostic Criteria: C

Those with C test result are advised to take the Confirmatory Examination.
(C) Immediate need for confirmatory examination.

## 1.5-2 Confirmatory Examination

We conduct fine-needle aspiration cytology (FNAC), blood test, and urine test for those with B or C test results.
1.5-3 Flow chart


### 1.6 Target Municipalities



### 2.1 Results (As of 31 October 2014)

## 2.1-1 Primary Examination

The participation rate as of 31 October 2014 is $80.7 \%$ ( $296,586 / 367,686$ ). See Appendix 2 and 3.
The results have been returned to $99.9 \%$ of the 296,253 participants (Appendix 4 and 5).
Those with A1 or A2 test results were $294,012(99.2 \%)$, B were $2,240(0.8 \%)$, and C were 1 .

Table 1. Screening test coverage as of 31 October 2014

|  | Target Population <br> a | Participants |  | Proportion (\%) <br> c (c/b) | Test results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Proportion (\%) <br> b (b/a) | Screened outside Fukushima |  | Class |  |  |  |
|  |  |  |  |  | A |  | Requiring confirmatory test |  |
|  |  |  |  |  | A1 d (d/c) | A2 e (e/c) | B f (f/c) | C g (g/c) |
| FY 2011 | 47,768 | 41,810 (87.5) | 2,025 | 41,810 ( 100.0) | 26,373 (63.1) | 15,216 (36.4) | 221 (0.5) | 0 (0.0) |
| FY 2012 | 161,137 | 139,341 (86.5) | 4,266 | 139,269 ( 99.9) | 76,160 (54.7) | 62,121 (44.6) | 987 (0.7) | 1 (0.0) |
| FY 2013 | 158,781 | 115,435 (72.7) | 3,070 | 115,174 (99.8) | 50,100 (43.5) | 64,042 (55.6) | 1,032 (0.9) | 0 (0.0) |
| Total | 367,686 | 296,586 (80.7) | 9,361 | 296,253 (99.9) | 152,633 (51.5) | 141,379 (47.7) | 2,240 (0.8) | 1 (0.0) |

Table 2. Number and proportion of children with nodules/cysts as of 31 October 2014

|  | Number of confirmed screening results | Number and proportions of children with nodules/cysts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nodules |  | Cysts |  |
|  |  | $\begin{gathered} \geq 5.1 \mathrm{~mm} \\ \text { b }(\mathrm{b} / \mathrm{a}) \end{gathered}$ | $\begin{gathered} \leq 5.0 \mathrm{~mm} \\ \mathrm{c}(\mathrm{c} / \mathrm{a}) \\ \hline \end{gathered}$ | $\begin{gathered} \geq 20.1 \mathrm{~mm} \\ \mathrm{~d}(\mathrm{~d} / \mathrm{a}) \end{gathered}$ | $\begin{gathered} \leq 20.0 \mathrm{~mm} \\ \mathrm{e}(\mathrm{e} / \mathrm{a}) \end{gathered}$ |
| FY 2011 | 41,810 | 219 (0.5) | 232 (0.6) | 1 (0.0) | 15,140 (36.2) |
| FY 2012 | 139,269 | 973 (0.7) | 730 (0.5) | 9 (0.0) | 62,234 (44.7) |
| FY 2013 | 115,174 | 1,030 (0.9) | 712 (0.6) | 2 (0.0) | 64,330 (55.9) |
| Total | 296,253 | 2,222 (0.8) | 1,674 (0.6) | 12 (0.0) | 141,704 (47.8) |

Fractions have been rounded and may not total to $100 \%$.
Because of the duplication of the participants, some numbers are not consistent with the previous ones.

## 2.1-2 Confirmatory Examination

The number of participants with B or C test results who required further testing is 2,241, of whom 2,051 (91.5\%) underwent the confirmatory testing. Among them, 1,985 ( $96.8 \%$ ) have completed the tests (Appendix 6).

Of 1,985 children, 673 ( $33.9 \%$ ), specifically 116 with A1 and 557 with A2 results (Table 3), were recommended for watchful waiting.
Of $1,312(66.1 \%)$ needed 6 to 12 months follow-up provided by health insurance, 519 ( $39.6 \%$ ) underwent FNAC.

Table 3. Confirmatory testing coverage and results as of 31 October 2014

|  | Number of children requiring confirmatory test | Participants <br> Proportion (\%) <br> b (b/a) | Confirmatory test coverage (\%) <br> c (c/b) | Confirmed test results |  | Follow-up advised |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Next screening advised |  |  |  |
|  |  |  |  | A1 $\mathrm{d}(\mathrm{~d} / \mathrm{c})$ | A2 $\mathrm{e}(\mathrm{e} / \mathrm{c})$ | f (f/c) | Cytology $g(g / f)$ |
| FY 2011 | 221 | 198 (89.6) | 197 ( 99.5) | 12 ( 6.1) | 44 (22.3) | 141 (71.6) | 91 ( 64.5) |
| FY 2012 | 988 | 917 (92.8) | 892 (97.3) | 53 ( 5.9) | 245 (27.5) | 594 (66.6) | 261 ( 43.9) |
| FY 2013 | 1,032 | 936 (90.7) | 896 ( 95.7) | 51 ( 5.7) | 268 (29.9) | 577 (64.4) | 167 (28.9) |
| Total | 2,241 | 2,051 (91.5) | 1,985 (96.8) | 116 ( 5.8) | 557 (28.1) | 1,312 (66.1) | 519 (39.6) |

Priority was given to those in urgent clinical need.
Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6 - or 12 -month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as "Follow-up advised".

### 2.2 Fine Needle Aspiration Biopsy and Cytology (FNAC)

## 2.2-1 Aspiration biopsy cytology results as of 31 October 2014

Those who were not diagnosed as suspicious or malignant were recommended for 6- to 12-months follow-up.

Target municipalities in FY 2011

| Suspicious or malignant | $15(15$ surgical cases: 1 of benign thyroid nodules; 13 of papillary thyroid <br> carcinoma; <br> 1 poorly differentiated thyroid carcinoma) |
| :--- | :--- |
| Male to female ratio | $5: 10$ |
| Mean age (SD, min-max) | $17.3(2.0,13-20)$ <br>  <br>  <br> Mean tumor size |

Target municipalities in FY 2012

| Suspicious or malignant | $56(50$ surgical cases: 49 of papillary thyroid carcinoma ; <br> 1 poorly differentiated thyroid carcinoma) |
| :--- | :--- |
| Male to female ratio | $21: 35$ |
| Mean age (SD, min-max) | $17.2(2.7,8-21)$ <br>  <br>  <br> $14.9(2.6,6-18)$ at the time of the disaster |
| Mean tumor size | $14.5 \mathrm{~mm}(7.8 \mathrm{~mm}, 5.2-40.5 \mathrm{~mm})$ |

Target municipalities in FY 2013

| Suspicious or malignant | $38(20$ surgical cases: 19 of papillary thyroid carcinoma; <br> 1 poorly differentiated thyroid carcinoma) |
| :--- | :--- |
| Male to female ratio | $12: 26$ |
| Mean age (SD, min-max) | $17.2(3.0,11-21)$ |
|  | $14.4(2.8,8-18$ at the time of the disaster) |
| Mean tumor size | $13.4 \mathrm{~mm}(7.0 \mathrm{~mm}, 5.1-35.9 \mathrm{~mm})$ |

Total for cases FY 2011 - FY 2013

| Suspicious or malignant | $109(85$ surgical cases: 1 of benign thyroid nodules; 81 of papillary thyroid <br> carcinoma; <br> 3 poorly differentiated thyroid carcinoma $)$ |
| :--- | :--- |
| Male to female ratio | $38: 71$ |
| Mean age $(\mathrm{SD}$, min-max) | $17.2(2.7,8-21)$ <br>  <br> $14.8(2.6,6-18)$ at the time of the disaster |
| Mean tumor size | $14.1 \mathrm{~mm}(7.3 \mathrm{~mm}, 5.1-40.5 \mathrm{~mm})$ |

2.2-2 Suspicious or malignant cases on FNAC by age and sex


Fig. 3 Age as of 11 March 2011


Fig. 4 Age as the date of confirmatory examination
2.2-3 Suspicious or malignant cases on FNAC by estimated radiation dose

Sixty-two of the 109 cases ( $56.9 \%$ ) participated in the Basic Survey (radiation dose estimates) and 58 of them, including 5 with less than four months' data, have received the results. Among those, 40 (69.0\%) had estimated radiation exposure dose below 1 mSv , and the highest effective dose was 2.2 mSv .

Table 5. Number of suspicious or malignant cases by age and sex
As of 31 October 2014

| Effective dose <br> $(\mathrm{mSv})$ | Sex | Age at the time of disaster |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  |  | $0-5$ | $6-10$ | $11-15$ | $16-18$ | Total |
| $<0.5$ | Male | 0 | 0 | 2 | $4(1)$ | $6(1)$ |
|  | Female | 0 | $4(1)$ | 6 | $10(2)$ | $20(3)$ |
| $0.5-1.0$ | Male | 0 | 0 | $4(1)$ | 2 | $6(1)$ |
|  | Female | 0 | 1 | 1 | 6 | 8 |
| $1.0-1.5$ | Male | 0 | 0 | 2 | 2 | 4 |
|  | Female | 0 | 0 | 5 | 1 | 6 |
| $1.5-2.0$ | Male | 0 | 0 | 1 | 0 | 1 |
|  | Female | 0 | 0 | 4 | 2 | 6 |
| $2.0-2.5$ | Male | 0 | 0 | 1 | 0 | 1 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| Total | Male | 0 | 0 | $10(1)$ | $8(1)$ | $18(2)$ |
|  | Female | 0 | $5(1)$ | 16 | $19(2)$ | $40(3)$ |

Numbers inside the brackets are estimates for participants with less than four months' data.


Fig. 5 Effective dose of the respondents
2.2-4 Blood and urinary iodine test results as of 31 October 2014

Table 6. Blood test results Mean $\pm$ SD (Abnormality ratio)

|  | FT4 1) <br> $(\mathrm{ng} / \mathrm{dL})$ | FT3 2) <br> $(\mathrm{pg} / \mathrm{mL})$ | $\mathrm{TSH} 3)$ <br> $(\mu \mathrm{IU} / \mathrm{mL})$ | $\mathrm{Tg} 4)$ <br> $(\mathrm{ng} / \mathrm{mL})$ | $\mathrm{TgAb} 5)$ <br> $(\mathrm{IU} / \mathrm{mL})$ | $\mathrm{TPOAb} 6)$ <br> $(\mathrm{IU} / \mathrm{mL})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reference Range | $0.95-1.74$ | $2.13-4.077)$ | $0.340-3.880$ | $\leq 32.7$ | $<28.0$ | $<16.0$ |
| 109 suspicious or malignant | $1.2 \pm 0.2(6.4 \%)$ | $3.4 \pm 0.4(5.5 \%)$ | $1.3 \pm 0.7(5.5 \%)$ | $38.2 \pm 78.1(34.9 \%)$ | $-(27.5 \%)$ | $-(15.6 \%)$ |
| Other 1,874 | $1.3 \pm 0.3(7.3 \%)$ | $3.6 \pm 0.9(6.1 \%)$ | $1.8 \pm 12.3(8.4 \%)$ | $33.8 \pm 183.7(17.7 \%)$ | $-(13.2 \%)$ | $-(9.6 \%)$ |

Table 7. Urinary iodine ( $\mu \mathrm{g} /$ day)

|  | Minimum | 25 th percentile | Median | 75th percentile | Maximum |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 109 suspicious or malignant | 42 | 134 | 226 | 368.5 | 6,020 |
| Other 1,871 | 24 | 120 | 196 | 368 | 35,700 |

1) FT4: Free Thyroxine; higher among patients with Graves' disease and lower with Hashimoto's disease.
2) FT3: Free Triiodothyronine; higher among patients with Graves' disease and lower with Hashimoto's disease.
3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.
4) Tg : Thyroglobulin; higher when thyroid tissue is destroyed or when thyroid cancer produces thyroglobulin.
5) $\operatorname{TgAb}$ : Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease.
6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.
7) Reference range differs according to age.

## 2.2-5 Confirmatory test results by municipality as of 31 October 2014

The proportion of suspicious or malignant is $0.03 \%$ in FY 2011 target municipalities ( 13 municipalities in the nationally designated evacuation zones), $0.04 \%$ in FY 2012 target municipalities (12 towns of the Kenchu area), and $0.03 \%$ in FY 2013 target municipalities (34 towns of the Iwaki, Kennan, and Aizu areas).

Table 8.
Confirmatory test results in FY 2011
(13 municipalities in the nationally designated evacuation zones)

|  | Number of <br> children screened | Number who <br> required <br> confirmatory test | Proportion who <br> required <br> confirmatory test <br> $(\%)$ | Number who <br> underwent <br> confirmatory test | Proportion of <br> Suspicious or <br> malignant cases ${ }^{1}$ |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Kawamata | 2,221 | 8 | 0.4 | 8 | 2 | 0.09 |
| malignant cases |  |  |  |  |  |  |
| $(\%)$ |  |  |  |  |  |  |$|$

1) Excluding one suspected case found benign by aspiration biopsy cytology.

Confirmatory test results by municipality in FY 2012

|  | Number of <br> children screened | Number who <br> required <br> confirmatory test | Proportion who <br> required <br> confirmatory test <br> $(\%)$ | Number who <br> underwent <br> confirmatory test | Suspicious or <br> malignant cases | Proportion of <br> suspicious or <br> malignant cases <br> $(\%)$ |
| :---: | ---: | :---: | ---: | ---: | ---: | ---: |
| Fukushima | 47,309 | 283 | 0.6 | 271 | 12 | 0.03 |
| Nihonmatsu | 8,857 | 57 | 0.6 | 54 | 5 | 0.06 |
| Motomiya | 5,234 | 29 | 0.6 | 29 | 3 | 0.06 |
| Otama | 1,373 | 7 | 0.5 | 7 | 2 | 0.15 |
| Koriyama | 54,063 | 458 | 0.8 | 413 | 25 | 0.05 |
| Kori | 1,874 | 14 | 0.7 | 13 | 0 | 0.00 |
| Kunimi | 1,437 | 15 | 1.0 | 13 | 0 | 0.00 |
| Tenei | 878 | 7 | 0.8 | 6 | 0 | 0.00 |
| Shirakawa | 10,811 | 61 | 0.6 | 59 | 6 | 0.06 |
| Nishigo | 3,618 | 30 | 0.8 | 26 | 1 | 0.03 |
| Izumizaki | 1,157 | 5 | 0.4 | 5 | 1 | 0.09 |
| Miharu | 2,730 | 22 | 0.8 | 21 | 1 | 0.04 |
| Subtotal | 139,341 | 988 | 0.7 | 917 | 56 | 0.04 |

Confirmatory test results by municipality in FY 2013

|  | Number of children screened | Number who required confirmatory test | Proportion who required confirmatory test (\%) | Number who underwent confirmatory test | Suspicious or malignant cases | Proportion of suspicious or malignant cases (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Iwaki* | 47,918 | 429 | 0.9 | 394 | 21 | 0.04 |
| Sukagawa | 11,591 | 101 | 0.9 | 96 | 4 | 0.03 |
| Soma | 5,085 | 46 | 0.9 | 42 | 0 | 0.00 |
| Kagamiishi | 1,952 | 9 | 0.5 | 8 | 0 | 0.00 |
| Shinchi | 1,110 | 7 | 0.6 | 7 | 0 | 0.00 |
| Nakajima | 801 | 2 | 0.2 | 2 | 0 | 0.00 |
| Yabuki | 2,462 | 17 | 0.7 | 13 | 0 | 0.00 |
| Ishikawa | 2,086 | 11 | 0.5 | 10 | 1 | 0.05 |
| Yamatsuri | 776 | 3 | 0.4 | 2 | 0 | 0.00 |
| Asakawa | 1,070 | 12 | 1.1 | 10 | 0 | 0.00 |
| Hirata | 829 | 9 | 1.1 | 9 | 1 | 0.12 |
| Tanagura | 2,259 | 22 | 1.0 | 22 | 1 | 0.04 |
| Hanawa | 1,218 | 8 | 0.7 | 7 | 0 | 0.00 |
| Samegawa | 507 | 3 | 0.6 | 1 | 0 | 0.00 |
| Ono | 1,327 | 14 | 1.1 | 13 | 0 | 0.00 |
| Tamakawa | 986 | 10 | 1.0 | 8 | 0 | 0.00 |
| Furudono | 792 | 6 | 0.8 | 6 | 0 | 0.00 |
| Hinoemata | 61 | 0 | 0.0 | 0 | 0 | 0.00 |
| Minami-aizu | 1,809 | 16 | 0.9 | 15 | 0 | 0.00 |
| Kaneyama | 137 | 0 | 0.0 | 0 | 0 | 0.00 |
| Showa | 101 | 0 | 0.0 | 0 | 0 | 0.00 |
| Mishima | 129 | 1 | 0.8 | 1 | 0 | 0.00 |
| Shimogo | 691 | 10 | 1.4 | 9 | 1 | 0.14 |
| Kitakata | 5,727 | 46 | 0.8 | 40 | 0 | 0.00 |
| Nishiaizu | 638 | 5 | 0.8 | 4 | 0 | 0.00 |
| Tadami | 494 | 7 | 1.4 | 6 | 0 | 0.00 |
| Inawashiro | 1,881 | 13 | 0.7 | 12 | 1 | 0.05 |
| Bandai | 414 | 4 | 1.0 | 3 | 0 | 0.00 |
| Kitashiobara | 385 | 1 | 0.3 | 1 | 0 | 0.00 |
| Aizumisato | 2,551 | 26 | 1.0 | 23 | 0 | 0.00 |
| Aizubange | 2,080 | 25 | 1.2 | 23 | 1 | 0.05 |
| Yanaizu | 375 | 2 | 0.5 | 2 | 0 | 0.00 |
| Aizuwakamatsu | 14,685 | 160 | 1.1 | 140 | 6 | 0.04 |
| Yugawa | 508 | 7 | 1.4 | 7 | 1 | 0.20 |
| Subtotal | 115,435 | 1,032 | 0.9 | 936 | 38 | 0.03 |


| Total | 296,586 | 2,241 | 0.8 | 2,051 | 108 | 0.04 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |

[^1]
## 3. Primary and confirmatory test results by municipality (Interim report)

In order to compare the results by municipality, we divided the area into three regions, Hamadori, Nakadori, and Aizu. Hamadori and Nakadori are divided into 13 municipalities in the nationally designated evacuation zones and otherwise.

The below is the interim report since the results of the Confirmatory Examination in Aizu area are not fully available yet.

Table 9. Proportion of B or C test results, and suspicious or malignant (Interim report)

|  |  |  | $\begin{gathered} 13 \\ \text { municipalities } \end{gathered}$ | $\text { Nakadori }{ }^{15}$ | $\text { Hamadori }{ }^{16}$ | $\mathrm{Aizu}^{17}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Target population |  |  | 47,768 | 199,456 | 70,535 | 49,927 | 367,686 |
| Number of participants of Primary Examination | $A^{10}$ |  | 41,810 | 167,825 | 54,006 | 32,612 | 296,253 |
| Mean age (SD) Total |  |  | 10.4 (5.3) | 10.7 (5.1) | 11.1 (4.9) | 11.1 (4.5) | - |
| Mean age (SD) Female |  |  | 10.4 (5.3) | 10.8 (5.2) | 11.3 (5.0) | 11.3 (4.6) | - |
| Mean age (SD) Male |  |  | 10.3 (5.2) | 10.5 (5.1) | 10.9 (4.9) | 10.9 (4.4) | - |
| Female (\%) |  | \% | 49.6 | 49.3 | 50.0 | 49.7 | 49.5 |
| B or C test results | B |  | 221 | 1,215 | 482 | 323 | 2,241 |
| Proportion of B or C test results | (B/A) | \% | 0.53 | 0.72 | 0.89 | 0.99 | 0.76 |
| Number of participants of Confirmatory Examination | $\mathrm{C}^{11}$ |  | 197 | 1,090 | 427 | 271 | 1,985 |
| Proportion of participants | (C/B) | \% | 89.1 | 89.7 | 88.6 | 83.9 | 88.6 |
| Participants of FNAC | $\mathrm{D}^{12}$ |  | 94 | 293 | 93 | 45 | 525 |
| Proportion of participants of Confirmatory Examination | (D/C) | \% | 47.7 | 26.9 | 21.8 | 16.6 | 26.4 |
| Proportion of participants of Primary Examination | (D/A) | \% | 0.22 | 0.17 | 0.17 | 0.14 | 0.18 |
| Number of suspicious or malignant | E ${ }^{13}$ |  | 14 | 63 | 21 | 10 | 108 |
| Proportion | (EDD) | \% | 14.9 | 21.5 | 22.6 | 22.2 | 20.6 |
| Proportion per 100,000 (E/A) |  |  | 33.5 | 37.5 | 38.9 | 30.7 | 36.5 |
|  |  | \% | (0.033) | (0.038) | (0.039) | (0.031) | (0.036) |

10) Excluding duplicates and unconfirmed results.
11) Excluding number of unconfirmed test results.
12) Number of those who underwent FNAC including A1 and A2 test results among participants of Confirmatory Examination.
13) Excluding one suspected case found benign by aspiration biopsy cytology.
14) Tamura, Minami-soma, Date, Kawamata, Hirono, Naraha, Tomioka, Kawauchi, Okuma, Futaba, Namie, Katsurao, Iitate
15) Fukushima, Koriyama, Shirakawa, Sukagawa, Nihonmatsu, Motomiya, Kori, Kunimi, Otama, Kagamiishi, Tenei, Nishigo, Izumizaki, Nakajima, Yabuki, Tanagura, Yamatsuri, Hanawa, Samegawa, Ishikawa, Tamakawa, Hirata, Asakawa, Furudono, Miharu, Ono
16) Iwaki, Soma, Shinchi
17) Aizuwakamatsu, Kitakata, Shimogo, Hinoemata, Tadami, Minami-aizu, Kitashiobara, Nishiaizu, Bandai, Inawashiro, Aizubange,

Yugawa, Yanaizu, Mishima, Kaneyama, Showa, Aizumisato

## Summary

Among the 296,253 participants of Primary Examination excluding duplicates and unconfirmed test results, proportion of B or C test results increased in all areas, and was highest in Aizu followed by Hamadori, Nakadori, and 13 municipalities of the nationally designated evacuation zones.
The proportion of suspicious or malignant was almost the same among 13 municipalities in the nationally designated evacuation zones, Nakadori, and Hamadori, but lower in Aizu since the proportion of those completed the Confirmatory Examination is lower.

FY 2011 is from 1 April 2011 through 31 March 2012.
FY 2012 is from 1 April 2012 through 31 March 2013.
FY 2013 is from 1 April 2013 through 31 March 2014.


## Appendix 1

| Participants by municipality |  | As of 31 October 2014 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Target Population | Age |  |  |  |
|  |  | 0-5 | 6-10 | 11-15 | 16-18 |
| FY 2011 |  |  |  |  |  |
| Kawamata | 2,394 | 588 | 631 | 719 | 456 |
| Namie | 3,643 | 1,023 | 920 | 1,031 | 669 |
| Iitate | 1,084 | 281 | 300 | 301 | 202 |
| Minami-soma | 12,526 | 3,697 | 3,418 | 3,297 | 2,114 |
| Date | 11,400 | 2,755 | 3,023 | 3,401 | 2,221 |
| Tamura | 7,068 | 1,738 | 1,807 | 2,073 | 1,450 |
| Hirono | 1,077 | 258 | 250 | 348 | 221 |
| Naraha | 1,432 | 351 | 362 | 415 | 304 |
| Tomioka | 2,962 | 767 | 740 | 897 | 558 |
| Kawauchi | 357 | 90 | 99 | 89 | 79 |
| Okuma | 2,385 | 782 | 634 | 619 | 350 |
| Futaba | 1,207 | 369 | 300 | 337 | 201 |
| Katsurao | 233 | 56 | 62 | 67 | 48 |
| Subtotal | 47,768 | 12,755 | 12,546 | 13,594 | 8,873 |
| FY 2012 |  |  |  |  |  |
| Fukushima | 53,555 | 15,250 | 14,062 | 14,880 | 9,363 |
| Nihonmatsu | 10,256 | 2,784 | 2,646 | 2,945 | 1,881 |
| Motomiya | 6,112 | 1,760 | 1,583 | 1,691 | 1,078 |
| Otama | 1,617 | 486 | 399 | 430 | 302 |
| Koriyama | 64,383 | 19,216 | 16,911 | 17,497 | 10,759 |
| Kori | 2,065 | 526 | 547 | 595 | 397 |
| Kunimi | 1,594 | 381 | 420 | 484 | 309 |
| Tenei | 1,061 | 300 | 284 | 280 | 197 |
| Shirakawa | 12,161 | 3,357 | 3,258 | 3,478 | 2,068 |
| Nishigo | 3,977 | 1,143 | 1,081 | 1,075 | 678 |
| Izumizaki | 1,289 | 353 | 355 | 335 | 246 |
| Miharu | 3,067 | 750 | 776 | 931 | 610 |
| Subtotal | 161,137 | 46,306 | 42,322 | 44,621 | 27,888 |
| FY 2013 |  |  |  |  |  |
| Iwaki* | 62,289 | 17,231 | 16,181 | 17,755 | 11,122 |
| Sukagawa | 15,308 | 4,344 | 4,096 | 4,255 | 2,613 |
| Soma | 6,813 | 1,981 | 1,778 | 1,849 | 1,205 |
| Kagamiishi | 2,597 | 740 | 707 | 723 | 427 |
| Shinchi | 1,433 | 391 | 394 | 411 | 237 |
| Nakajima | 1,079 | 270 | 282 | 317 | 210 |
| Yabuki | 3,277 | 981 | 850 | 896 | 550 |
| Ishikawa | 2,848 | 711 | 722 | 831 | 584 |
| Yamatsuri | 1,010 | 287 | 236 | 315 | 172 |
| Asakawa | 1,340 | 340 | 379 | 372 | 249 |
| Hirata | 1,208 | 329 | 298 | 342 | 239 |
| Tanagura | 2,988 | 867 | 744 | 882 | 495 |
| Hanawa | 1,662 | 415 | 391 | 531 | 325 |
| Samegawa | 694 | 178 | 172 | 186 | 158 |
| Ono | 1,936 | 496 | 490 | 568 | 382 |
| Tamakawa | 1,332 | 384 | 347 | 369 | 232 |
| Furudono | 1,040 | 287 | 242 | 315 | 196 |
| Hinoemata | 107 | 23 | 30 | 34 | 20 |
| Minami-aizu | 2,823 | 713 | 682 | 841 | 587 |
| Kaneyama | 203 | 40 | 52 | 72 | 39 |
| Showa | 128 | 44 | 38 | 33 | 13 |
| Mishima | 192 | 43 | 55 | 53 | 41 |
| Shimogo | 1,007 | 265 | 252 | 293 | 197 |
| Kitakata | 8,910 | 2,293 | 2,334 | 2,578 | 1,705 |
| Nishiaizu | 1,019 | 216 | 245 | 334 | 224 |
| Tadami | 710 | 195 | 177 | 201 | 137 |
| Inawashiro | 2,662 | 704 | 659 | 768 | 531 |
| Bandai | 617 | 180 | 163 | 166 | 108 |
| Kitashiobara | 557 | 159 | 140 | 156 | 102 |
| Aizumisato | 3,658 | 916 | 909 | 1,098 | 735 |
| Aizubange | 3,081 | 766 | 800 | 958 | 557 |
| Yanaizu | 590 | 158 | 142 | 175 | 115 |
| Aizuwakamatsu | 22,987 | 6,261 | 5,965 | 6,578 | 4,183 |
| Yugawa | 676 | 179 | 177 | 192 | 128 |
| Subtotal | 158,781 | 43,387 | 41,129 | 45,447 | 28,818 |
|  |  |  |  |  |  |
| Total | 367,686 | 102,448 | 95,997 | 103,662 | 65,579 |

Because of the duplication of the participants, some numbers are not consistent with the previous ones.

## Appendix 2

Thyroid Ultrasound Examination (TUE) coverage by municipality

Screening coverage by municipality in FY 2011 (13 municipalities in the nationally designated zones)
As of 31 October 2014

| Participants living outside Fukushima <br> c 4) | Proportion <br> (\%) <br> c/b |
| :---: | :---: |
| 123 | 5.5 |
| 1,189 | 36.6 |
| 88 | 9.3 |
| 2,876 | 26.7 |
| 575 | 5.4 |
| 216 | 3.4 |
| 151 | 18.0 |
| 225 | 19.5 |
| 631 | 27.4 |
| 53 | 18.9 |
| 500 | 25.3 |
| 424 | 44.7 |
| 15 | 8.2 |
| 7,066 | 16.9 |

1) Number of participants. 2) Number of participants/Number in the target population age group.
2) Number of participants in the age group/Number of participants.
3) Number of participants currently living outside Fukushima.
4) Number of participants who underwent the test outside Fukushima.

Because of the duplication of the participants, some numbers are not consistent with the previous ones.
Fractions have been rounded and may not total to $100 \%$. Ages are at the time of the disaster.
While some participants who underwent the test at their schools had been categorized according to the municipalities of their schools in the previous survey, they were categorized into the municipalities they belonged at the time of the disaster.

Screening coverage by municipality in FY 2012


As of 31 October 2014

| Participants living outside Fukushima c 4) | Proportion <br> (\%) <br> c/b |
| :---: | :---: |
| 3,553 | 7.5 |
| 439 | 5.0 |
| 228 | 4.4 |
| 42 | 3.1 |
| 3,795 | 7.0 |
| 68 | 3.6 |
| 53 | 3.7 |
| 31 | 3.5 |
| 599 | 5.5 |
| 197 | 5.4 |
| 44 | 3.8 |
| 105 | 3.8 |
| 9,154 | 6.6 |

Screening coverage by municipality in FY 2013

|  | Target Population <br> a | Participants |  | Proportion <br> (\%) <br> b/a | Number and proportion of participants by age group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Screened outside Fukushima 5) |  |  |  |  |  |
|  |  | b |  |  | 0-5 | 6-10 | 11-15 | 16-18 |
| Iwaki* | 62,289 | 47,918 | 1,617 | 76.9 | 13,825 | 15,450 | 13,864 | 4,779 |
|  |  |  |  |  | 80.2 | 95.5 | 78.1 | 43.0 |
|  |  |  |  |  | 28.9 | 32.2 | 28.9 | 10.0 |
| Sukagawa | 15,308 | 11,591 | 253 | 75.7 | 3,615 | 3,968 | 3,060 | 948 |
|  |  |  |  |  | 83.2 | 96.9 | 71.9 | 36.3 |
|  |  |  |  |  | 31.2 | 34.2 | 26.4 | 8.2 |
| Soma | 6,813 | 5,085 | 226 | 74.6 | 1,658 | 1,656 | 1,324 | 447 |
|  |  |  |  |  | 83.7 | 93.1 | 71.6 | 37.1 |
|  |  |  |  |  | 32.6 | 32.6 | 26.0 | 8.8 |
| Kagamiishi | 2,597 | 1,952 | 33 | 75.2 | 611 | 684 | 507 | 150 |
|  |  |  |  |  | 82.6 | 96.7 | 70.1 | 35.1 |
|  |  |  |  |  | 31.3 | 35.0 | 26.0 | 7.7 |
| Shinchi | 1,433 | 1,110 | 63 | 77.5 | 341 | 377 | 300 | 92 |
|  |  |  |  |  | 87.2 | 95.7 | 73.0 | 38.8 |
|  |  |  |  |  | 30.7 | 34.0 | 27.0 | 8.3 |
| Nakajima | 1,079 | 801 | 9 | 74.2 | 226 | 273 | 248 | 54 |
|  |  |  |  |  | 83.7 | 96.8 | 78.2 | 25.7 |
|  |  |  |  |  | 28.2 | 34.1 | 31.0 | 6.7 |
| Yabuki | 3,277 | 2,462 | 53 | 75.1 | 869 | 828 | 625 | 140 |
|  |  |  |  |  | 88.6 | 97.4 | 69.8 | 25.5 |
|  |  |  |  |  | 35.3 | 33.6 | 25.4 | 5.7 |
| Ishikawa | 2,848 | 2,086 | 53 | 73.2 | 659 | 684 | 589 | 154 |
|  |  |  |  |  | 92.7 | 94.7 | 70.9 | 26.4 |
|  |  |  |  |  | 31.6 | 32.8 | 28.2 | 7.4 |
| Yamatsuri | 1,010 | 776 | 17 | 76.8 | 268 | 233 | 226 | 49 |
|  |  |  |  |  | 93.4 | 98.7 | 71.7 | 28.5 |
|  |  |  |  |  | 34.5 | 30.0 | 29.1 | 6.3 |
| Asakawa | 1,340 | 1,070 | 25 | 79.9 | 316 | 371 | 297 | 86 |
|  |  |  |  |  | 92.9 | 97.9 | 79.8 | 34.5 |
|  |  |  |  |  | 29.5 | 34.7 | 27.8 | 8.0 |
| Hirata | 1,208 | 829 | 13 | 68.6 | 273 | 284 | 215 | 57 |
|  |  |  |  |  | 83.0 | 95.3 | 62.9 | 23.8 |
|  |  |  |  |  | 32.9 | 34.3 | 25.9 | 6.9 |
| Tanagura | 2,988 | 2,259 | 41 | 75.6 | 754 | 730 | 622 | 153 |
|  |  |  |  |  | 87.0 | 98.1 | 70.5 | 30.9 |
|  |  |  |  |  | 33.4 | 32.3 | 27.5 | 6.8 |
| Hanawa | 1,662 | 1,218 | 26 | 73.3 | 368 | 382 | 371 | 97 |
|  |  |  |  |  | 88.7 | 97.7 | 69.9 | 29.8 |
|  |  |  |  |  | 30.2 | 31.4 | 30.5 | 8.0 |
| Samegawa | 694 | 507 | 14 | 73.1 | 171 | 170 | 128 | 38 |
|  |  |  |  |  | 96.1 | 98.8 | 68.8 | 24.1 |
|  |  |  |  |  | 33.7 | 33.5 | 25.2 | 7.5 |
| Ono | 1,936 | 1,327 | 34 | 68.5 | 395 | 468 | 358 | 106 |
|  |  |  |  |  | 79.6 | 95.5 | 63.0 | 27.7 |
|  |  |  |  |  | 29.8 | 35.3 | 27.0 | 8.0 |
| Tamakawa | 1,332 | 986 | 12 | 74.0 | 341 | 339 | 241 | 65 |
|  |  |  |  |  | 88.8 | 97.7 | 65.3 | 28.0 |
|  |  |  |  |  | 34.6 | 34.4 | 24.4 | 6.6 |
| Furudono | 1,040 | 792 | 23 | 76.2 | 263 | 239 | 233 | 57 |
|  |  |  |  |  | 91.6 | 98.8 | 74.0 | 29.1 |
|  |  |  |  |  | 33.2 | 30.2 | 29.4 | 7.2 |

As of 31 October 2014

| Participants living outside Fukushima $\text { ( } 4 \text { ) }$ | Proportion (\%) <br> c/b |
| :---: | :---: |
| 2,163 | 4.5 |
| 332 | 2.9 |
| 339 | 6.7 |
| 42 | 2.2 |
| 52 | 4.7 |
| 12 | 1.5 |
| 53 | 2.2 |
| 48 | 2.3 |
| 19 | 2.4 |
| 27 | 2.5 |
| 10 | 1.2 |
| 50 | 2.2 |
| 26 | 2.1 |
| 16 | 3.2 |
| 29 | 2.2 |
| 13 | 1.3 |
| 23 | 2.9 |

[^2]Screening coverage by municipality in FY 2013

|  | Target Population <br> a | Participants |  | Proportion <br> (\%) | Number and proportion of participants by age group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Screened outside Fukushima 5) |  |  |  |  |  |
|  |  | b |  | b/a | 0-5 | 6-10 | 11-15 | 16-18 |
| Hinoemata | 107 | 61 | 3 | 57.0 | 15 | 27 | 19 | 0 |
|  |  |  |  |  | 65.2 | 90.0 | 55.9 | 0.0 |
|  |  |  |  |  | 24.6 | 44.3 | 31.1 | 0.0 |
| Minami-aizu | 2,823 | 1,809 | 22 | 64.1 | 605 | 641 | 457 | 106 |
|  |  |  |  |  | 84.9 | 94.0 | 54.3 | 18.1 |
|  |  |  |  |  | 33.4 | 35.4 | 25.3 | 5.9 |
| Kaneyama | 203 | 137 | 7 | 67.5 | 34 | 50 | 47 | 6 |
|  |  |  |  |  | 85.0 | 96.2 | 65.3 | 15.4 |
|  |  |  |  |  | 24.8 | 36.5 | 34.3 | 4.4 |
| Showa | 128 | 101 | 0 | 78.9 | 37 | 38 | 25 | 1 |
|  |  |  |  |  | 84.1 | 100.0 | 75.8 | 7.7 |
|  |  |  |  |  | 36.6 | 37.6 | 24.8 | 1.0 |
| Mishima | 192 | 129 | 1 | 67.2 | 29 | 54 | 37 | 9 |
|  |  |  |  |  | 67.4 | 98.2 | 69.8 | 22.0 |
|  |  |  |  |  | 22.5 | 41.9 | 28.7 | 7.0 |
| Shimogo | 1,007 | 691 | 13 | 68.6 | 243 | 233 | 177 | 38 |
|  |  |  |  |  | 91.7 | 92.5 | 60.4 | 19.3 |
|  |  |  |  |  | 35.2 | 33.7 | 25.6 | 5.5 |
| Kitakata | 8,910 | 5,727 | 68 | 64.3 | 1,635 | 2,232 | 1,485 | 375 |
|  |  |  |  |  | 71.3 | 95.6 | 57.6 | 22.0 |
|  |  |  |  |  | 28.5 | 39.0 | 25.9 | 6.5 |
| Nishiaizu | 1,019 | 638 | 4 | 62.6 | 201 | 238 | 172 | 27 |
|  |  |  |  |  | 93.1 | 97.1 | 51.5 | 12.1 |
|  |  |  |  |  | 31.5 | 37.3 | 27.0 | 4.2 |
| Tadami | 710 | 494 | 4 | 69.6 | 161 | 169 | 147 | 17 |
|  |  |  |  |  | 82.6 | 95.5 | 73.1 | 12.4 |
|  |  |  |  |  | 32.6 | 34.2 | 29.8 | 3.4 |
| Inawashiro | 2,662 | 1,881 | 34 | 70.7 | 612 | 643 | 481 | 145 |
|  |  |  |  |  | 86.9 | 97.6 | 62.6 | 27.3 |
|  |  |  |  |  | 32.5 | 34.2 | 25.6 | 7.7 |
| Bandai | 617 | 414 | 9 | 67.1 | 133 | 159 | 94 | 28 |
|  |  |  |  |  | 73.9 | 97.5 | 56.6 | 25.9 |
|  |  |  |  |  | 32.1 | 38.4 | 22.7 | 6.8 |
| Kitashiobara | 557 | 385 | 9 | 69.1 | 144 | 137 | 93 | 11 |
|  |  |  |  |  | 90.6 | 97.9 | 59.6 | 10.8 |
|  |  |  |  |  | 37.4 | 35.6 | 24.2 | 2.9 |
| Aizumisato | 3,658 | 2,551 | 25 | 69.7 | 827 | 873 | 686 | 165 |
|  |  |  |  |  | 90.3 | 96.0 | 62.5 | 22.4 |
|  |  |  |  |  | 32.4 | 34.2 | 26.9 | 6.5 |
| Aizubange | 3,081 | 2,080 | 29 | 67.5 | 613 | 752 | 576 | 139 |
|  |  |  |  |  | 80.0 | 94.0 | 60.1 | 25.0 |
|  |  |  |  |  | 29.5 | 36.2 | 27.7 | 6.7 |
| Yanaizu | 590 | 375 | 3 | 63.6 | 127 | 129 | 103 | 16 |
|  |  |  |  |  | 80.4 | 90.8 | 58.9 | 13.9 |
|  |  |  |  |  | 33.9 | 34.4 | 27.5 | 4.3 |
| Aizuwakamatsu | 22,987 | 14,685 | 320 | 63.9 | 4,155 | 5,639 | 4,029 | 862 |
|  |  |  |  |  | 66.4 | 94.5 | 61.2 | 20.6 |
|  |  |  |  |  | 28.3 | 38.4 | 27.4 | 5.9 |
| Yugawa | 676 | 508 | 7 | 75.1 | 166 | 177 | 128 | 37 |
|  |  |  |  |  | 92.7 | 100.0 | 66.7 | 28.9 |
|  |  |  |  |  | 32.7 | 34.8 | 25.2 | 7.3 |
| Subtotal | 158,781 | 115,435 | 3,070 | 72.7 | 34,690 | 39,327 | 31,964 | 9,454 |
|  |  |  |  |  | 80.0 | 95.6 | 70.3 | 32.8 |
|  |  |  |  |  | 30.1 | 34.1 | 27.7 | 8.2 |


| Participants living outside Fukushima | Proportion <br> (\%) <br> c/b |
| :---: | :---: |
| 3 | 4.9 |
| 32 | 1.8 |
| 6 | 4.4 |
| 4 | 4.0 |
| 0 | 0.0 |
| 15 | 2.2 |
| 83 | 1.4 |
| 6 | 0.9 |
| 4 | 0.8 |
| 63 | 3.3 |
| 11 | 2.7 |
| 8 | 2.1 |
| 39 | 1.5 |
| 33 | 1.6 |
| 3 | 0.8 |
| 399 | 2.7 |
| 8 | 1.6 |
| 3,971 | 3.4 |


| Total | 367,686 | 296,586 | 9,361 | 80.7 | 86,429 | 91,852 | 84,730 | 33,575 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 84.4 | 95.7 | 81.7 | 51.2 |
|  |  |  |  |  | 29.1 | 31.0 | 28.6 | 11.3 |

## Appendix 3

Thyroid Ultrasound Examination (TUE) coverage by prefecture

| Prefecture | Number of test venues | Participants | Prefecture | Number of test venues | Participants | Prefecture | Number of test venues | Participants |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hokkaido | 4 | 332 | Fukui | 1 | 22 | Hiroshima | 1 | 37 |
| Aomori | 1 | 162 | Yamanashi | 1 | 82 | Yamaguchi | 1 | 24 |
| Iwate | 3 | 186 | Nagano | 2 | 132 | Tokushima | 1 | 10 |
| Miyagi | 2 | 1,519 | Gifu | 1 | 43 | Kagawa | 1 | 29 |
| Akita | 1 | 208 | Shizuoka | 2 | 110 | Ehime | 1 | 23 |
| Yamagata | 3 | 454 | Aichi | 3 | 179 | Kōchi | 1 | 14 |
| Ibaraki | 4 | 439 | Mie | 1 | 38 | Fukuoka | 2 | 81 |
| Tochigi | 5 | 448 | Shiga | 1 | 20 | Saga | 1 | 7 |
| Gunma | 1 | 185 | Kyōto | 3 | 97 | Nagasaki | 2 | 25 |
| Saitama | 1 | 249 | Ōsaka | 6 | 210 | Kumamoto | 1 | 25 |
| Chiba | 3 | 279 | Hyōgo | 1 | 135 | Ōita | 1 | 35 |
| Tōkyō | 12 | 1,757 | Nara | 1 | 25 | Miyazaki | 1 | 35 |
| Kanagawa | 4 | 745 | Wakayama | 1 | 13 | Kagoshima | 1 | 30 |
| Niigata | 1 | 614 | Tottori | 1 | 15 | Okinawa | 1 | 117 |
| Toyama | 1 | 34 | Shimane | 1 | 13 |  |  |  |
| Ishikawa | 1 | 45 | Okayama | 3 | 79 | Total | 92 | 9,361 |

Participants underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (twice in Niigata and Kanagawa respectively, and three times in Yamagata) or by local specialists.

## Appendix 4

Thyroid Ultrasound Examination (TUE) results by municipality
Primary test results in FY 2011 (13 municipalities in the nationally designated zones)
As of 31 October 2014

|  | Participants | $\begin{gathered} \text { Number } \\ \text { confirmed } \\ b \\ \hline- \end{gathered}$ | Number by test results |  |  |  | Nodules |  | Cysts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Proportion (\%) |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Proportion (\%) } \\ \text { b/a (\%) } \\ \hline \end{gathered}$ | A |  | B | C | Proportion (\%) |  | Proportion (\%) |  |
|  |  |  | A1 | A2 |  |  | $\geq 5.1 \mathrm{~mm}$ | $\leq 5.0 \mathrm{~mm}$ | $\geq 20.1 \mathrm{~mm}$ | $\leq 20.0 \mathrm{~mm}$ |
| Kawamata | 2,221 | 2,221 | 1,520 | 693 | 8 | 0 | 8 | 17 | 0 | 681 |
|  |  | 100.0 | 68.4 | 31.2 | 0.4 | 0.0 | 0.4 | 0.8 | 0.0 | 30.7 |
| Namie | 3,249 | 3,249 | 2,119 | 1,104 | 26 | 0 | 26 | 42 | 0 | 1,088 |
|  |  | 100.0 | 65.2 | 34.0 | 0.8 | 0.0 | 0.8 | 1.3 | 0.0 | 33.5 |
| Iitate | 943 | 943 | 693 | 244 | 6 | 0 | 6 | 15 | 0 | 233 |
|  |  | 100.0 | 73.5 | 25.9 | 0.6 | 0.0 | 0.6 | 1.6 | 0.0 | 24.7 |
| Minami-soma | 10,789 | 10,789 | 6,789 | 3,948 | 52 | 0 | 52 | 87 | 0 | 3,905 |
|  |  | 100.0 | 62.9 | 36.6 | 0.5 | 0.0 | 0.5 | 0.8 | 0.0 | 36.2 |
| Date | 10,605 | 10,605 | 6,748 | 3,807 | 50 | 0 | 48 | 31 | 1 | 3,808 |
|  |  | 100.0 | 63.6 | 35.9 | 0.5 | 0.0 | 0.5 | 0.3 | 0.0 | 35.9 |
| Tamura | 6,325 | 6,325 | 4,000 | 2,293 | 32 | 0 | 32 | 11 | 0 | 2,299 |
|  |  | 100.0 | 63.2 | 36.3 | 0.5 | 0.0 | 0.5 | 0.2 | 0.0 | 36.3 |
| Hirono | 838 | 838 | 521 | 312 | 5 | 0 | 5 | 3 | 0 | 313 |
|  |  | 100.0 | 62.2 | 37.2 | 0.6 | 0.0 | 0.6 | 0.4 | 0.0 | 37.4 |
| Naraha | 1,153 | 1,153 | 651 | 495 | 7 | 0 | 7 | 4 | 0 | 498 |
|  |  | 100.0 | 56.5 | 42.9 | 0.6 | 0.0 | 0.6 | 0.3 | 0.0 | 43.2 |
| Tomioka | 2,302 | 2,302 | 1,350 | 939 | 13 | 0 | 13 | 8 | 0 | 939 |
|  |  | 100.0 | 58.6 | 40.8 | 0.6 | 0.0 | 0.6 | 0.3 | 0.0 | 40.8 |
| Kawauchi | 280 | 280 | 156 | 120 | 4 | 0 | 4 | 1 | 0 | 120 |
|  |  | 100.0 | 55.7 | 42.9 | 1.4 | 0.0 | 1.4 | 0.4 | 0.0 | 42.9 |
| Okuma | 1,973 | 1,973 | 1,140 | 819 | 14 | 0 | 14 | 7 | 0 | 816 |
|  |  | 100.0 | 57.8 | 41.5 | 0.7 | 0.0 | 0.7 | 0.4 | 0.0 | 41.4 |
| Futaba | 949 | 949 | 570 | 376 | 3 | 0 | 3 | 3 | 0 | 375 |
|  |  | 100.0 | 60.1 | 39.6 | 0.3 | 0.0 | 0.3 | 0.3 | 0.0 | 39.5 |
| Katsurao | 183 | 183 | 116 | 66 | 1 | 0 | 1 | 3 | 0 | 65 |
|  |  | 100.0 | 63.4 | 36.1 | 0.5 | 0.0 | 0.5 | 1.6 | 0.0 | 35.5 |
| Subtotal | 41,810 | 41,810 | 26,373 | 15,216 | 221 | 0 | 219 | 232 | 1 | 15,140 |
|  |  | 100.0 | 63.1 | 36.4 | 0.5 | 0.0 | 0.5 | 0.6 | 0.0 | 36.2 |

Fractions are rounded and may not total to $100 \%$.
Because of the duplication of the participants, some numbers are not consistent with the previous ones.
Fractions have been rounded and may not total to $100 \%$. Ages are at the time of the disaster.
While some participants who underwent the test at their schools had been categorized according to the municipalities of their schools in the previous survey, they were categorized into the municipalities they belonged at the time of the disaster.

| Primary test results in FY 2012 |  |  |  |  |  |  |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Participants | Number confirmed b | Number by test results |  |  |  | Nodules |  | Cysts |  |
|  |  |  | Proportion (\%) |  |  |  |  |  |  |  |
|  |  |  |  |  |  | C | Proportion (\%) |  | Proportion (\%) |  |
|  |  | $\begin{array}{\|c} \hline \text { Proportion (\%) } \\ \text { b/a (\%) } \\ \hline \end{array}$ | A1 | A2 | B |  | $\geq 5.1 \mathrm{~mm}$ | $\leq 5.0 \mathrm{~mm}$ | $\geq 20.1 \mathrm{~mm}$ | $\leq 20.0 \mathrm{~mm}$ |
| Fukushima | 47,309 | 47,309 | 26,964 | 20,062 | 283 | 0 | 276 | 196 | 3 | 20,079 |
|  |  | 100.0 | 57.0 | 42.4 | 0.6 | 0.0 | 0.6 | 0.4 | 0.0 | 42.4 |
| Nihonmatsu | 8,857 | 8,857 | 5,198 | 3,602 | 56 | 1 | 56 | 46 | 1 | 3,605 |
|  |  | 100.0 | 58.7 | 40.7 | 0.6 | 0.0 | 0.6 | 0.5 | 0.0 | 40.7 |
| Motomiya | 5,234 | 5,234 | 2,955 | 2,250 | 29 | 0 | 27 | 25 | 1 | 2,254 |
|  |  | 100.0 | 56.5 | 43.0 | 0.6 | 0.0 | 0.5 | 0.5 | 0.0 | 43.1 |
| Otama | 1,373 | 1,373 | 816 | 550 | 7 | 0 | 7 | 8 | 0 | 550 |
|  |  | 100.0 | 59.4 | 40.1 | 0.5 | 0.0 | 0.5 | 0.6 | 0.0 | 40.1 |
| Koriyama | 54,063 | 54,000 | 27,894 | 25,648 | 458 | 0 | 454 | 332 | 3 | 25,731 |
|  |  | 99.9 | 51.7 | 47.5 | 0.8 | 0.0 | 0.8 | 0.6 | 0.0 | 47.7 |
| Kori | 1,874 | 1,871 | 1,024 | 833 | 14 | 0 | 14 | 9 | 0 | 834 |
|  |  | 99.8 | 54.7 | 44.5 | 0.7 | 0.0 | 0.7 | 0.5 | 0.0 | 44.6 |
| Kunimi | 1,437 | 1,436 | 763 | 658 | 15 | 0 | 14 | 9 | 1 | 662 |
|  |  | 99.9 | 53.1 | 45.8 | 1.0 | 0.0 | 1.0 | 0.6 | 0.1 | 46.1 |
| Tenei | 878 | 878 | 528 | 343 | 7 | 0 | 7 | 4 | 0 | 348 |
|  |  | 100.0 | 60.1 | 39.1 | 0.8 | 0.0 | 0.8 | 0.5 | 0.0 | 39.6 |
| Shirakawa | 10,811 | 10,808 | 6,109 | 4,638 | 61 | 0 | 61 | 54 | 0 | 4,635 |
|  |  | 100.0 | 56.5 | 42.9 | 0.6 | 0.0 | 0.6 | 0.5 | 0.0 | 42.9 |
| Nishigo | 3,618 | 3,618 | 2,085 | 1,503 | 30 | 0 | 30 | 21 | 0 | 1,503 |
|  |  | 100.0 | 57.6 | 41.5 | 0.8 | 0.0 | 0.8 | 0.6 | 0.0 | 41.5 |
| Izumizaki | 1,157 | 1,156 | 523 | 628 | 5 | 0 | 5 | 11 | 0 | 624 |
|  |  | 99.9 | 45.2 | 54.3 | 0.4 | 0.0 | 0.4 | 1.0 | 0.0 | 54.0 |
| Miharu | 2,730 | 2,729 | 1,301 | 1,406 | 22 | 0 | 22 | 15 | 0 | 1,409 |
|  |  | 100.0 | 47.7 | 51.5 | 0.8 | 0.0 | 0.8 | 0.5 | 0.0 | 51.6 |
| Subtotal | 139,341 | 139,269 | 76,160 | 62,121 | 987 | 1 | 973 | 730 | 9 | 62,234 |
|  |  | 99.9 | 54.7 | 44.6 | 0.7 | 0.0 | 0.7 | 0.5 | 0.0 | 44.7 |

Primary test results in FY 2013
As of 31 October 2014


[^3]| Primary test results in FY 2013 |  |  |  |  |  |  |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Participants | $\begin{gathered} \hline \text { Number } \\ \text { confirmed } \\ \mathrm{b} \\ \hline \end{gathered}$ | Number by test results |  |  |  | Nodules |  | Cysts |  |
|  |  |  | Proportion (\%) |  |  |  |  |  |  |  |
|  |  |  | A |  |  | C | Proportion (\%) |  | Proportion (\%) |  |
|  |  | $\begin{gathered} \text { Proportion (\%) } \\ \text { b/a (\%) } \\ \hline \end{gathered}$ | A1 | A2 | B |  | $\geq 5.1 \mathrm{~mm}$ | $\leq 5.0 \mathrm{~mm}$ | $\geq 20.1 \mathrm{~mm}$ | $\leq 20.0 \mathrm{~mm}$ |
| Hinoemata | 61 | 61 | 25 | 36 | 0 | 0 | 0 | 3 | 0 | 34 |
|  |  | 100.0 | 41.0 | 59.0 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 55.7 |
| Minami-aizu | 1,809 | 1,805 | 738 | 1,051 | 16 | 0 | 16 | 13 | 0 | 1,053 |
|  |  | 99.8 | 40.9 | 58.2 | 0.9 | 0.0 | 0.9 | 0.7 | 0.0 | 58.3 |
| Kaneyama | 137 | 136 | 64 | 72 | 0 | 0 | 0 | 1 | 0 | 72 |
|  |  | 99.3 | 47.1 | 52.9 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 52.9 |
| Showa | 101 | 101 | 56 | 45 | 0 | 0 | 0 | 0 | 0 | 45 |
|  |  | 100.0 | 55.4 | 44.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.6 |
| Mishima | 129 | 129 | 38 | 90 | 1 | 0 | 1 | 0 | 0 | 91 |
|  |  | 100.0 | 29.5 | 69.8 | 0.8 | 0.0 | 0.8 | 0.0 | 0.0 | 70.5 |
| Shimogo | 691 | 690 | 318 | 362 | 10 | 0 | 10 | 4 | 0 | 365 |
|  |  | 99.9 | 46.1 | 52.5 | 1.4 | 0.0 | 1.4 | 0.6 | 0.0 | 52.9 |
| Kitakata | 5,727 | 5,717 | 2,270 | 3,401 | 46 | 0 | 46 | 41 | 0 | 3,408 |
|  |  | 99.8 | 39.7 | 59.5 | 0.8 | 0.0 | 0.8 | 0.7 | 0.0 | 59.6 |
| Nishiaizu | 638 | 638 | 243 | 390 | 5 | 0 | 5 | 5 | 0 | 392 |
|  |  | 100.0 | 38.1 | 61.1 | 0.8 | 0.0 | 0.8 | 0.8 | 0.0 | 61.4 |
| Tadami | 494 | 492 | 202 | 283 | 7 | 0 | 7 | 3 | 0 | 285 |
|  |  | 99.6 | 41.1 | 57.5 | 1.4 | 0.0 | 1.4 | 0.6 | 0.0 | 57.9 |
| Inawashiro | 1,881 | 1,877 | 780 | 1,084 | 13 | 0 | 13 | 13 | 0 | 1,085 |
|  |  | 99.8 | 41.6 | 57.8 | 0.7 | 0.0 | 0.7 | 0.7 | 0.0 | 57.8 |
| Bandai | 414 | 413 | 168 | 241 | 4 | 0 | 4 | 2 | 0 | 243 |
|  |  | 99.8 | 40.7 | 58.4 | 1.0 | 0.0 | 1.0 | 0.5 | 0.0 | 58.8 |
| Kitashiobara | 385 | 383 | 160 | 222 | 1 | 0 | 1 | 3 | 0 | 222 |
|  |  | 99.5 | 41.8 | 58.0 | 0.3 | 0.0 | 0.3 | 0.8 | 0.0 | 58.0 |
| Aizumisato | 2,551 | 2,548 | 1,060 | 1,462 | 26 | 0 | 26 | 17 | 0 | 1,474 |
|  |  | 99.9 | 41.6 | 57.4 | 1.0 | 0.0 | 1.0 | 0.7 | 0.0 | 57.8 |
| Aizubange | 2,080 | 2,079 | 842 | 1,212 | 25 | 0 | 25 | 9 | 0 | 1,222 |
|  |  | 100.0 | 40.5 | 58.3 | 1.2 | 0.0 | 1.2 | 0.4 | 0.0 | 58.8 |
| Yanaizu | 375 | 375 | 177 | 196 | 2 | 0 | 2 | 0 | 0 | 198 |
|  |  | 100.0 | 47.2 | 52.3 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 52.8 |
| Aizuwakamatsu | 14,685 | 14,661 | 6,052 | 8,449 | 160 | 0 | 159 | 114 | 1 | 8,498 |
|  |  | 99.8 | 41.3 | 57.6 | 1.1 | 0.0 | 1.1 | 0.8 | 0.0 | 58.0 |
| Yugawa | 508 | 507 | 186 | 314 | 7 | 0 | 7 | 2 | 0 | 317 |
|  |  | 99.8 | 36.7 | 61.9 | 1.4 | 0.0 | 1.4 | 0.4 | 0.0 | 62.5 |
| Subtotal | 115,435 | 115,174 | 50,100 | 64,042 | 1,032 | 0 | 1,030 | 712 | 2 | 64,330 |
|  |  | 99.8 | 43.5 | 55.6 | 0.9 | 0.0 | 0.9 | 0.6 | 0.0 | 55.9 |


| Total | 296,586 | 296,253 | 152,633 | 141,379 | 2,240 | 1 | 2,222 | 1,674 | 12 | 141,704 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 99.9 | 51.5 | 47.7 | 0.8 | 0.0 | 0.8 | 0.6 | 0.0 | 47.8 |

## Appendix 5

1. Thyroid Ultrasound Examination results by age and sex

|  |  |  |  |  |  |  |  |  |  |  |  |  | As of 31 October 2014 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  |  |  |  |  | B |  |  | C |  |  | Total |  |  |
|  | A1 |  |  | A2 |  |  |  |  |  |  |  |  |  |  |  |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-5 | 30,969 | 28,259 | 59,228 | 13,278 | 13,733 | 27,011 | 41 | 57 | 98 | 0 | 0 | 0 | 44,288 | 42,049 | 86,337 |
| 6-10 | 21,413 | 18,296 | 39,709 | 25,589 | 26,180 | 51,769 | 116 | 236 | 352 | 0 | 0 | 0 | 47,118 | 44,712 | 91,830 |
| 11-15 | 19,908 | 17,075 | 36,983 | 22,354 | 24,301 | 46,655 | 316 | 654 | 970 | 0 | 0 | 0 | 42,578 | 42,030 | 84,608 |
| 16-18 | 8,160 | 8,553 | 16,713 | 7,141 | 8,803 | 15,944 | 279 | 541 | 820 | 0 | 1 | 1 | 15,580 | 17,898 | 33,478 |
| Total | 80,450 | 72,183 | 152,633 | 68,362 | 73,017 | 141,379 | 752 | 1,488 | 2,240 | 0 | 1 | 1 | 149,564 | 146,689 | 296,253 |

Test results by age group (Male)


Test results by age group (Female)


Percentages have been rounded and may not total to $100 \%$.
Ages are at the time of the disaster.

## 2. Nodule size

| Nodule size | Total |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Test result | Proportion |
|  |  | Male | Female |  |  |
| None | 292,357 | 148,138 | 144,219 | A1 | 98.7\% |
| $\leq 3.0 \mathrm{~mm}$ | 415 | 187 | 228 | A2 | 0.6\% |
| $3.1-5.0 \mathrm{~mm}$ | 1,259 | 493 | 766 |  |  |
| $5.1-10.0 \mathrm{~mm}$ | 1,574 | 561 | 1,013 | B | 0.8\% |
| $10.1-15.0 \mathrm{~mm}$ | 403 | 113 | 290 |  |  |
| $15.1-20.0 \mathrm{~mm}$ | 130 | 39 | 91 |  |  |
| $20.1-25.0 \mathrm{~mm}$ | 58 | 17 | 41 |  |  |
| $\geq 25.1 \mathrm{~mm}$ | 57 | 16 | 41 |  |  |
| Total | 296,253 | 149,564 | 146,689 | - |  |




## 3. Cyst size

| Cyst size | Total |  |  | Class | \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |  |
| None | 154,537 | 81,182 | 73,355 | A1 | 81.4\% |
| $\leq 3.0 \mathrm{~mm}$ | 86,707 | 44,428 | 42,279 | A2 |  |
| $3.1-5.0 \mathrm{~mm}$ | 47,778 | 21,396 | 26,382 |  | 18.6\% |
| $5.1-10.0 \mathrm{~mm}$ | 7,084 | 2,513 | 4,571 |  |  |
| $10.1-15.0 \mathrm{~mm}$ | 121 | 41 | 80 |  |  |
| $15.1-20.0 \mathrm{~mm}$ | 14 | 1 | 13 |  |  |
| $20.1-25.0 \mathrm{~mm}$ | 8 | 1 | 7 | B | 0.004\% |
| $\geq 25.1 \mathrm{~mm}$ | 4 | 2 | 2 |  |  |
| Total | 296,253 | 149,564 | 146,689 | , |  |




## Appendix 6

Confirmatory test results by municipality

| Number of children screened | Number who required confirmatory test | Number of children who underwent confirmatory test by age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Ages 0-5 | Ages 6-10 | Ages 11-15 | Ages 16-18 |
| a | b | c | d | e | f | g |
|  | Proportion (\%) | Proportion <br> (\%) | Proportion <br> (\%) | Proportion <br> (\%) | Proportion <br> (\%) | Proportion <br> (\%) |


| Kawamata | 2,221 | 8 | 8 | 0 | 1 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0.4 | 100.0 | 0.0 | 12.5 | 37.5 | 50.0 |
| Namie | 3,249 | 26 | 23 | 1 | 3 | 7 | 12 |
|  |  | 0.8 | 88.5 | 4.3 | 13.0 | 30.4 | 52.2 |
| Iitate | 943 | 6 | 6 | 0 | 2 | 1 | 3 |
|  |  | 0.6 | 100.0 | 0.0 | 33.3 | 16.7 | 50.0 |
| Minami-soma | 10,789 | 52 | 48 | 6 | 5 | 16 | 21 |
|  |  | 0.5 | 92.3 | 12.5 | 10.4 | 33.3 | 43.8 |
| Date | 10,605 | 50 | 45 | 0 | 3 | 16 | 26 |
|  |  | 0.5 | 90.0 | 0.0 | 6.7 | 35.6 | 57.8 |
| Tamura | 6,325 | 32 | 26 | 1 | 3 | 12 | 10 |
|  |  | 0.5 | 81.3 | 3.8 | 11.5 | 46.2 | 38.5 |
| Hirono | 838 | 5 | 4 | 0 | 1 | 1 | 2 |
|  |  | 0.6 | 80.0 | 0.0 | 25.0 | 25.0 | 50.0 |
| Naraha | 1,153 | 7 | 6 | 1 | 0 | 1 | 4 |
|  |  | 0.6 | 85.7 | 16.7 | 0.0 | 16.7 | 66.7 |
| Tomioka | 2,302 | 13 | 12 | 0 | 1 | 5 | 6 |
|  |  | 0.6 | 92.3 | 0.0 | 8.3 | 41.7 | 50.0 |
| Kawauchi | 280 | 4 | 4 | 0 | 1 | 0 | 3 |
|  |  | 1.4 | 100.0 | 0.0 | 25.0 | 0.0 | 75.0 |
| Okuma | 1,973 | 14 | 13 | 1 | 1 | 6 | 5 |
|  |  | 0.7 | 92.9 | 7.7 | 7.7 | 46.2 | 38.5 |
| Futaba | 949 | 3 | 2 | 0 | 0 | 1 | 1 |
|  |  | 0.3 | 66.7 | 0.0 | 0.0 | 50.0 | 50.0 |
| Katsurao | 183 | 1 | 1 | 0 | 1 | 0 | 0 |
|  |  | 0.5 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Subtotal | 41,810 | 221 | 198 | 10 | 22 | 69 | 97 |
|  |  | 0.5 | 89.6 | 5.1 | 11.1 | 34.8 | 49.0 |

Target municipalities for Confirmatory test in FY 2012

| Fukushima | 47,309 | 283 | 271 | 6 | 28 | 106 | 131 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0.6 | 95.8 | 2.2 | 10.3 | 39.1 | 48.3 |
| Nihonmatsu | 8,857 | 57 | 54 | 0 | 5 | 27 | 22 |
|  |  | 0.6 | 94.7 | 0.0 | 9.3 | 50.0 | 40.7 |
| Motomiya | 5,234 | 29 | 29 | 1 | 4 | 14 | 10 |
|  |  | 0.6 | 100.0 | 3.4 | 13.8 | 48.3 | 34.5 |
| Otama | 1,373 | 7 | 7 | 0 | 0 | 4 | 3 |
|  |  | 0.5 | 100.0 | 0.0 | 0.0 | 57.1 | 42.9 |
| Koriyama | 54,063 | 458 | 413 | 20 | 65 | 172 | 156 |
|  |  | 0.8 | 90.2 | 4.8 | 15.7 | 41.6 | 37.8 |
| Kori | 1,874 | 14 | 13 | 1 | 2 | 3 | 7 |
|  |  | 0.7 | 92.9 | 7.7 | 15.4 | 23.1 | 53.8 |
| Kunimi | 1,437 | 15 | 13 | 2 | 2 | 2 | 7 |
|  |  | 1.0 | 86.7 | 15.4 | 15.4 | 15.4 | 53.8 |
| Tenei | 878 | 7 | 6 | 1 | 2 | 1 | 2 |
|  |  | 0.8 | 85.7 | 16.7 | 33.3 | 16.7 | 33.3 |
| Shirakawa | 10,811 | 61 | 59 | 2 | 10 | 27 | 20 |
|  |  | 0.6 | 96.7 | 3.4 | 16.9 | 45.8 | 33.9 |
| Nishigo | 3,618 | 30 | 26 | 2 | 6 | 9 | 9 |
|  |  | 0.8 | 86.7 | 7.7 | 23.1 | 34.6 | 34.6 |
| Izumizaki | 1,157 | 5 | 5 | 0 | 2 | 0 | 3 |
|  |  | 0.4 | 100.0 | 0.0 | 40.0 | 0.0 | 60.0 |
| Miharu | 2,730 | 22 | 21 | 0 | 1 | 11 | 9 |
|  |  | 0.8 | 95.5 | 0.0 | 4.8 | 52.4 | 42.9 |
| Subtotal | 139,341 | 988 | 917 | 35 | 127 | 376 | 379 |
|  |  | 0.7 | 92.8 | 3.8 | 13.8 | 41.0 | 41.3 |


| Number of confirmed results |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Total | Next screening advised |  | Follow-up advised |  |
|  |  |  |  | Aspiration |
| h | $\begin{gathered} \text { A1 } \\ \text { i } \end{gathered}$ | A2 | k | 1 |
| Proportion (\%) | Proportion <br> (\%) | Proportion <br> (\%) | Proportion <br> (\%) | Proportion <br> (\%) |


| 7 | 1 | 0 | 6 | 5 |
| :---: | :---: | :---: | :---: | :---: |
| 87.5 | 14.3 | 0.0 | 85.7 | 83.3 |
| 23 | 1 | 4 | 18 | 12 |
| 100.0 | 4.3 | 17.4 | 78.3 | 66.7 |
| 6 | 0 | 3 | 3 | 3 |
| 100.0 | 0.0 | 50.0 | 50.0 | 100.0 |
| 48 | 4 | 11 | 33 | 19 |
| 100.0 | 8.3 | 22.9 | 68.8 | 57.6 |
| 45 | 4 | 8 | 33 | 23 |
| 100.0 | 8.9 | 17.8 | 73.3 | 69.7 |
| 26 | 0 | 5 | 21 | 14 |
| 100.0 | 0.0 | 19.2 | 80.8 | 66.7 |
| 4 | 1 | 2 | 1 | 0 |
| 100.0 | 25.0 | 50.0 | 25.0 | 0.0 |
| 6 | 0 | 2 | 4 | 2 |
| 100.0 | 0.0 | 33.3 | 66.7 | 50.0 |
| 12 | 0 | 2 | 10 | 7 |
| 100.0 | 0.0 | 16.7 | 83.3 | 70.0 |
| 4 | 0 | 1 | 3 | 2 |
| 100.0 | 0.0 | 25.0 | 75.0 | 66.7 |
| 13 | 1 | 5 | 7 | 2 |
| 100.0 | 7.7 | 38.5 | 53.8 | 28.6 |
| 2 | 0 | 0 | 2 | 2 |
| 100.0 | 0.0 | 0.0 | 100.0 | 100.0 |
| 1 | 0 | 1 | 0 | 0 |
| 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| 197 | 12 | 44 | 141 | 91 |
| 99.5 | 6.1 | 22.3 | 71.6 | 64.5 |


| 264 | 12 | 68 | 184 | 93 |
| :---: | :---: | :---: | :---: | :---: |
| 97.4 | 4.5 | 25.8 | 69.7 | 50.5 |
| 52 | 2 | 7 | 43 | 24 |
| 96.3 | 3.8 | 13.5 | 82.7 | 55.8 |
| 28 | 0 | 9 | 19 | 7 |
| 96.6 | 0.0 | 32.1 | 67.9 | 36.8 |
| 7 | 0 | 1 | 6 | 4 |
| 100.0 | 0.0 | 14.3 | 85.7 | 66.7 |
| 399 | 24 | 127 | 248 | 99 |
| 96.6 | 6.0 | 31.8 | 62.2 | 39.9 |
| 13 | 0 | 2 | 11 | 3 |
| 100.0 | 0.0 | 15.4 | 84.6 | 27.3 |
| 13 | 1 | 2 | 10 | 4 |
| 100.0 | 7.7 | 15.4 | 76.9 | 40.0 |
| 6 | 1 | 2 | 3 | 0 |
| 100.0 | 16.7 | 33.3 | 50.0 | 0.0 |
| 58 | 6 | 13 | 39 | 15 |
| 98.3 | 10.3 | 22.4 | 67.2 | 38.5 |
| 26 | 2 | 8 | 16 | 5 |
| 100.0 | 7.7 | 30.8 | 61.5 | 31.3 |
| 5 | 1 | 2 | 2 | 1 |
| 100.0 | 20.0 | 40.0 | 40.0 | 50.0 |
| 21 | 4 | 4 | 13 | 6 |
| 100.0 | 19.0 | 19.0 | 61.9 | 46.2 |
| 892 | 53 | 245 | 594 | 261 |
| 97.3 | 5.9 | 27.5 | 66.6 | 43.9 |

h) Excluding participants who have not receive the test results.

|  | Number of children screened <br> a |  | Number of children who underwent confirmatory test by age |  |  |  |  | Total | Number of confirmed results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Ages 0-5 | Ages 6-10 | Ages 11-15 | Ages 16-18 |  | Next screen | ng advised |  | Aspiration |
|  |  |  | c <br> Proportion <br> (\%) | d <br> Proportion <br> (\%) | e <br> Proportion <br> (\%) | f <br> Proportion <br> (\%) | g <br> Proportion (\%) | $\begin{gathered} \mathrm{h} \\ \text { Proportion (\%) } \end{gathered}$ | A1 <br> i <br> Proportion <br> (\%) | A 2 j Proportion <br> (\%) | k <br> Proportion <br> (\%) | 1 <br> Proportion <br> $(\%)$ |
| Target municipalities for Confirmatory test in FY 2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Iwaki* | 47,918 | 429 | 394 | 21 | 59 | 193 | 121 | 380 | 20 | 121 | 239 | 83 |
|  |  | 0.9 | 91.8 | 5.3 | 15.0 | 49.0 | 30.7 | 96.4 | 5.3 | 31.8 | 62.9 | 34.7 |
| Sukagawa | 11,591 | 101 | 96 | 6 | 16 | 52 | 22 | 95 | 7 | 32 | 56 | 12 |
|  |  | 0.9 | 95.0 | 6.3 | 16.7 | 54.2 | 22.9 | 99.0 | 7.4 | 33.7 | 58.9 | 21.4 |
| Soma | 5,085 | 46 | 42 | 3 | 9 | 19 | 11 | 41 | 3 | 16 | 22 | 6 |
|  |  | 0.9 | 91.3 | 7.1 | 21.4 | 45.2 | 26.2 | 97.6 | 7.3 | 39.0 | 53.7 | 27.3 |
| Kagamiishi | 1,952 | 9 | 8 | 0 | 4 | 3 | 1 | 8 | 0 | 1 | 7 | 1 |
|  |  | 0.5 | 88.9 | 0.0 | 50.0 | 37.5 | 12.5 | 100.0 | 0.0 | 12.5 | 87.5 | 14.3 |
| Shinchi | 1,110 | 7 | 7 | 0 | 3 | 3 | 1 | 6 | 0 | 0 | 6 | 3 |
|  |  | 0.6 | 100.0 | 0.0 | 42.9 | 42.9 | 14.3 | 85.7 | 0.0 | 0.0 | 100.0 | 50.0 |
| Nakajima | 801 | 2 | 2 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 |
|  |  | 0.2 | 100.0 | 0.0 | 0.0 | 50.0 | 50.0 | 100.0 | 0.0 | 0.0 | 100.0 | 50.0 |
| Yabuki | 2,462 | 17 | 13 | 0 | 2 | 6 | 5 | 12 | 0 | 3 | 9 | 1 |
|  |  | 0.7 | 76.5 | 0.0 | 15.4 | 46.2 | 38.5 | 92.3 | 0.0 | 25.0 | 75.0 | 11.1 |
| Ishikawa | 2,086 | 11 | 10 | 0 | 4 | 4 | 2 | 10 | 0 | 1 | 9 | 5 |
|  |  | 0.5 | 90.9 | 0.0 | 40.0 | 40.0 | 20.0 | 100.0 | 0.0 | 10.0 | 90.0 | 55.6 |
| Yamatsuri | 776 | 3 | 2 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 0 |
|  |  | 0.4 | 66.7 | 0.0 | 0.0 | 50.0 | 50.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Asakawa | 1,070 | 12 | 10 | 1 | 1 | 5 | 3 | 10 | 0 | 2 | 8 | 2 |
|  |  | 1.1 | 83.3 | 10.0 | 10.0 | 50.0 | 30.0 | 100.0 | 0.0 | 20.0 | 80.0 | 25.0 |
| Hirata | 829 | 9 | 9 | 0 | 4 | 3 | 2 | 8 | 1 | 1 | 6 | 1 |
|  |  | 1.1 | 100.0 | 0.0 | 44.4 | 33.3 | 22.2 | 88.9 | 12.5 | 12.5 | 75.0 | 16.7 |
| Tanagura | 2,259 | 22 | 22 | 2 | 5 | 9 | 6 | 19 | 2 | 2 | 15 | 5 |
|  |  | 1.0 | 100.0 | 9.1 | 22.7 | 40.9 | 27.3 | 86.4 | 10.5 | 10.5 | 78.9 | 33.3 |
| Hanawa | 1,218 | 8 | 7 | 0 | 1 | 3 | 3 | 4 | 0 | 1 | 3 | 0 |
|  |  | 0.7 | 87.5 | 0.0 | 14.3 | 42.9 | 42.9 | 57.1 | 0.0 | 25.0 | 75.0 | 0.0 |
| Samegawa | 507 | 3 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
|  |  | 0.6 | 33.3 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Ono | 1,327 | 14 | 13 | 1 | 2 | 6 | 4 | 13 | 1 | 4 | 8 | 0 |
|  |  | 1.1 | 92.9 | 7.7 | 15.4 | 46.2 | 30.8 | 100.0 | 7.7 | 30.8 | 61.5 | 0.0 |
| Tamakawa | 986 | 10 | 8 | 1 | 2 | 2 | 3 | 8 | 0 | 2 | 6 | 1 |
|  |  | 1.0 | 80.0 | 12.5 | 25.0 | 25.0 | 37.5 | 100.0 | 0.0 | 25.0 | 75.0 | 16.7 |
| Furudono | 792 | 6 | 6 | 0 | 1 | 4 | 1 | 6 | 0 | 2 | 4 | 1 |
|  |  | 0.8 | 100.0 | 0.0 | 16.7 | 66.7 | 16.7 | 100.0 | 0.0 | 33.3 | 66.7 | 25.0 |
| Hinoemata | 61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Minami-aizu | 1,809 | 16 | 15 | 0 | 7 | 7 | 1 | 13 | 1 | 3 | 9 | 2 |
|  |  | 0.9 | 93.8 | 0.0 | 46.7 | 46.7 | 6.7 | 86.7 | 7.7 | 23.1 | 69.2 | 22.2 |
| Kaneyama | 137 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Showa | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mishima | 129 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
|  |  | 0.8 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Shimogo | 691 | 10 | 9 | 0 | 1 | 5 | 3 | 8 | 0 | 3 | 5 | 2 |
|  |  | 1.4 | 90.0 | 0.0 | 11.1 | 55.6 | 33.3 | 88.9 | 0.0 | 37.5 | 62.5 | 40.0 |
| Kitakata | 5,727 | 46 | 40 | 1 | 11 | 17 | 11 | 40 | 2 | 11 | 27 | 11 |
|  |  | 0.8 | 87.0 | 2.5 | 27.5 | 42.5 | 27.5 | 100.0 | 5.0 | 27.5 | 67.5 | 40.7 |
| Nishiaizu | 638 | 5 | 4 | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 0 |
|  |  | 0.8 | 80.0 | 0.0 | 50.0 | 25.0 | 25.0 | 50.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Tadami | 494 | 7 | 6 | 0 | 3 | 3 | 0 | 6 | 0 | 2 | 4 | 1 |
|  |  | 1.4 | 85.7 | 0.0 | 50.0 | 50.0 | 0.0 | 100.0 | 0.0 | 33.3 | 66.7 | 25.0 |
| Inawashiro | 1,881 | 13 | 12 | 1 | 1 | 7 | 3 | 12 | 2 | 3 | 7 | 1 |
|  |  | 0.7 | 92.3 | 8.3 | 8.3 | 58.3 | 25.0 | 100.0 | 16.7 | 25.0 | 58.3 | 14.3 |
| Bandai | 414 | 4 | 3 | 1 | 0 | 1 | 1 | 3 | 1 | 0 | 2 | 0 |
|  |  | 1.0 | 75.0 | 33.3 | 0.0 | 33.3 | 33.3 | 100.0 | 33.3 | 0.0 | 66.7 | 0.0 |
| Kitashiobara | 385 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
|  |  | 0.3 | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Aizumisato | 2,551 | 26 | 23 | 0 | 4 | 12 | 7 | 21 | 2 | 9 | 10 | 3 |
|  |  | 1.0 | 88.5 | 0.0 | 17.4 | 52.2 | 30.4 | 91.3 | 9.5 | 42.9 | 47.6 | 30.0 |
| Aizubange | 2,080 | 25 | 23 | 3 | 4 | 9 | 7 | 23 | 0 | 4 | 19 | 4 |
|  |  | 1.2 | 92.0 | 13.0 | 17.4 | 39.1 | 30.4 | 100.0 | 0.0 | 17.4 | 82.6 | 21.1 |
| Yanaizu | 375 | 2 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | 0 |
|  |  | 0.5 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 | 0.0 | 50.0 | 50.0 | 0.0 |
| Aizuwakamatsu | 14,685 | 160 | 140 | 6 | 31 | 76 | 27 | 132 | 8 | 43 | 81 | 20 |
|  |  | 1.1 | 87.5 | 4.3 | 22.1 | 54.3 | 19.3 | 94.3 | 6.1 | 32.6 | 61.4 | 24.7 |
| Yugawa | 508 | 7 | 7 | 0 | 1 | 3 | 3 | 7 | 1 | 0 | 6 | 1 |
|  |  | 1.4 | 100.0 | 0.0 | 14.3 | 42.9 | 42.9 | 100.0 | 14.3 | 0.0 | 85.7 | 16.7 |
| Subtotal | 115,435 | 1,032 | 936 | 48 | 179 | 457 | 252 | 896 | 51 | 268 | 577 | 167 |
|  |  | 0.9 | 90.7 | 5.1 | 19.1 | 48.8 | 26.9 | 95.7 | 5.7 | 29.9 | 64.4 | 28.9 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | $296,586$ | 2,241 | 2,051 | 93 | 328 | 902 | 728 | 1,985 | 116 | 557 | 1,312 | 519 |
|  |  | 0.8 | 91.5 | 4.5 | 16.0 | 44.0 | 35.5 | 96.8 | 5.8 | 28.1 | 66.1 | 39.6 |

*Including districts of FY 2012

## Thyroid Ultrasound Examination (Full-scale Thyroid Screening Program)

Reported on 25 December 2014
Revised on 2 February 2015

## 1. Summary

### 1.1 Purpose

In order to protect the long-term health of children, we are now engaged in a Full-scale Thyroid Screening Program following a preliminary Initial Screening period.

### 1.2 Group

Residents of Fukushima Prefecture including visitors who were born between 2 April 1992 and 1 April 2011 (Initial Screening), and those who were born between 2 April 2011 and 1 April 2012.

### 1.3 Implementation Period

The full-scale screening starts from 2 April 2014 and lasts for two years.
We repeat the examination every two years until the age of 20, and every five years afterwards.

### 1.4 Responsible Organizations

Fukushima Prefecture commissioned Fukushima Medical University to conduct the survey in cooperation with institutions inside and outside Fukushima.

We provide the Primary Examination at ten medical institutions under contract, and try to have more institutions inside Fukushima Prefecture.

Ninety-two institutions outside Fukushima have agreed to cooperate as of 31 October 2014.
The confirmatory examination has been conducted in Koriyama and Iwaki in Fukushima Prefecture from July 2013, Aizuwakamatsu from August 2014, and several institutions outside Fukushima Prefecture from November 2013. There are 25 institutions that provide the examination as of 31 October 2014.

### 1.5 Method

## 1.5-1 Primary Examination

We used ultrasonography for examination of the thyroid gland.
Assessments were made by specialists on the basis of the following criteria.
-Diagnostic Criteria: A
Those with A1 and A2 test results were advised to take the next examination starting from April 2014.
(A1) No nodules / cysts
(A2) Nodules $\leq 5.0 \mathrm{~mm}$ or cysts $\leq 20.0 \mathrm{~mm}$
-Diagnostic Criteria: B
Those with B test result are advised to take the Confirmatory Examination.
(B) Nodules $\geq 5.1 \mathrm{~mm}$ or cysts $\geq 20.1 \mathrm{~mm}$

Some A2 test results may be classified as B results when clinically indicated.

## -Diagnostic Criteria: C

Those with C test result are advised to take the Confirmatory Examination.
(C) Immediate need for confirmatory examination.

## 1.5-2 Confirmatory Examination

We conduct fine-needle aspiration cytology (FNAC), blood test, and urine test for those with B or C test results.

## 1.5-3 Flow chart



### 1.6 Target Municipalities

25 target municipalities for FY 2014

34 target municipalities for FY 2015


## 2. Results (As of 31 October 2014)

## 2.1-1 Primary Examination

The Primary Examination started from 2 April 2014, and the participation rate as of 31 October 2014 is $37.9 \%$ $(82,101)$ out of around 220,000 from 25 municipalities (Appendix 1 and 2).
The results have been returned to $73.7 \%(60,505)$ of the participants (Appendix 3).
Those with A1 or A2 test results were 60,048 ( $99.2 \%$ ), B were 457 ( $0.8 \%$ ), and C were 0 .

Table 1. Screening test coverage as of 31 October 2014

|  | Target Population$\mathbf{a}$ | Participants |  | Proportion (\%) <br> c (c/b) | Test results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Proportion (\%) <br> b (b/a) | $\begin{gathered} \text { Screened } \\ \text { outside } \\ \text { Fukushima } \end{gathered}$ |  | Class |  |  |  |
|  |  |  |  |  | A |  | Requiring confirmatory test |  |
|  |  |  |  |  | A1 d (d/c) | A2e (e/c) | B f (f/c) | Cg (g/c) |
| FY 2014 | 216,189 | 81,621 (37.8) | 5,057 | 60,110 ( 73.6) | 25,418 (42.3) | 34,237 (57.0) | 455 (0.8) | 0 (0.0) |
| FY 2015 | 480 | 480 (100.0) | 4 | 395 ( 82.3) | 145 (36.7) | 248 (62.8) | 2 (0.5) | 0 (0.0) |
| Total | 216,669 | 82,101 (37.9) | 5,061 | 60,505 ( 73.7) | 25,563 (42.2) | 34,485 (57.0) | 457 (0.8) | 0 (0.0) |

Table 2. Number and proportion of children with nodules/cysts as of 31 October 2014

|  | Number of confirmed screening results <br> a | Number and proportions of children with nodules/cysts |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nodules |  | Cysts |  |
|  |  | $\begin{gathered} \geq 5.1 \mathrm{~mm} \\ \text { b (b/a) } \\ \hline \end{gathered}$ | $\begin{gathered} \leq 5.0 \mathrm{~mm} \\ \mathrm{c}(\mathrm{c} / \mathrm{a}) \\ \hline \end{gathered}$ | $\begin{gathered} \geq 20.1 \mathrm{~mm} \\ \mathrm{~d}(\mathrm{~d} / \mathrm{a}) \end{gathered}$ | $\begin{gathered} \leq 20.0 \mathrm{~mm} \\ \text { e (e/a) } \\ \hline \end{gathered}$ |
| FY 2014 | 60,110 | 453 (0.8) | 358 (0.6) | 1 (0.0) | 34,388 (57.2) |
| FY 2015 | 395 | 2 (0.5) | 2 (0.5) | 0 (0.0) | 247 (62.5) |
| Total | 60,505 | 455 (0.8) | 360 (0.6) | 1 (0.0) | 34,635 (57.2) |

Fractions have been rounded and may not total to $100 \%$.

## 2.1-2 Comparison with the Initial Screening

Among 60,048 participants who were diagnosed as A1 or A2, 56,204 (93.6\%) had A1 or A2 results from the Initial Screening. Among 457 participants who were diagnosed as B, 333 (72.9\%) had A1 or A2 results from the Initial Screening.

|  |  |  | Number ofconfirmed testresults of Full-scaleThyroid ScreeningProgram (\%)a | Results of the Initial Screening |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A | $\begin{gathered} \mathrm{B} \\ \mathrm{~d} \\ \mathrm{~d} / \mathrm{a}(\%) \end{gathered}$ |  | Nonparticipants f f/a (\%) |
|  |  |  | $\begin{gathered} \mathrm{A} 1 \\ \mathrm{~b} \\ \mathrm{~b} / \mathrm{a}(\%) \end{gathered}$ |  | $\begin{gathered} \mathrm{A} 2 \\ \mathrm{c} \\ \mathrm{c} / \mathrm{a}(\%) \end{gathered}$ |  | $\begin{gathered} \mathrm{C} \\ \mathrm{e} \\ \mathrm{e} / \mathrm{a}(\%) \end{gathered}$ |
| Results of the Fullscale Thyroid Screening | A | A1 |  | $\begin{array}{r} 25,563 \\ (100.0) \end{array}$ | $\begin{array}{r} 21,142 \\ (82.7) \\ \hline \end{array}$ | $\begin{aligned} & 1,899 \\ & (7.4) \end{aligned}$ | $\begin{gathered} 19 \\ (0.1) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 2,503 \\ (9.8) \\ \hline \end{array}$ |
|  |  | A2 |  | $\begin{aligned} & \hline 34,485 \\ & (100.0) \end{aligned}$ | $\begin{aligned} & 12,840 \\ & (37.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 20,323 \\ & (58.9) \\ & \hline \end{aligned}$ | $\begin{gathered} 65 \\ (0.2) \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{aligned} & 1,257 \\ & (3.6) \end{aligned}$ |
|  |  | B | $\begin{gathered} 457 \\ (100.0) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (27.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 206 \\ (45.1) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (23.6) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (3.5) \\ \hline \end{gathered}$ |
|  |  | C | $\begin{gathered} \hline 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ |
|  |  | Total | $\begin{aligned} & \hline 60,505 \\ & (100.0) \\ & \hline \end{aligned}$ | $\begin{array}{r} 34,109 \\ (56.4) \\ \hline \end{array}$ | $\begin{array}{r} 22,428 \\ (37.1) \\ \hline \end{array}$ | $\begin{gathered} 192 \\ (0.3) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{aligned} & 3,776 \\ & (6.2) \\ & \hline \end{aligned}$ |

## 2.1-3 Confirmatory Examination

The number of children who required further testing (started in June 2014) is 457, of whom 248 (54.3\%) underwent the confirmatory testing. Among them, 155 (62.5\%) have completed the tests (Appendix 4).
Of 155 participants with B test results from the Primary Examination, $62(40.0 \%)$ with confirmed test results of Confirmatory Examination have been confirmed within the range of A1 and A2, and were advised to take their next regularly scheduled examination.

Those who require 6-12-month follow-up provided by health insurance were 93 (60.0\%).
Table 4. Confirmatory testing coverage and results as of 31 October 2014

|  | Number ofchildrenrequiringconfirmatorytest | Participants <br> Proportion (\%) <br> b (b/a) | Confirmatory test coverage (\%) <br> c (c/b) | Confirmed test results |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Next screening advised |  | Follow-up advised |  |
|  |  |  |  | $\begin{array}{r} \mathbf{A 1} \\ \mathbf{d}(\mathbf{d} / \mathbf{c}) \\ \hline \end{array}$ | $\begin{array}{r} \text { A2 } \\ \text { e (e/c) } \end{array}$ | f (f/c) | $\begin{aligned} & \text { Cytology } \\ & \mathrm{g}(\mathrm{~g} / \mathrm{f}) \end{aligned}$ |
| FY 2014 | 455 | 246 (54.1) | 155 ( 63.0) | 9 (5.8) | 53 (34.2) | 93 (60.0) | 11 ( 11.8) |
| FY 2015 | 2 | 2 (100.0) | 0 (0.0) | 0 ( 0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Total | 457 | 248 (54.3) | 155 ( 62.5) | 9 (5.8) | 53 (34.2) | 93 (60.0) | 11 ( 11.8) |

Priority was given to those in urgent clinical need.
Those confirmed within the range of A1 and A2 (including those with other thyroid conditions) were advised to take their next regularly scheduled examination.

Those who require 6- or 12-month follow-up provided by health insurance and those beyond the specified level of A2 were categorized as "Follow-up advised".

### 2.2 Fine Needle Aspiration Biopsy and Cytology (FNAC)

2.2-1 Aspiration biopsy cytology results

Table 5. Target municipalities in FY 2014

| Suspicious or malignant | $4(0$ surgical case $)$ |
| :--- | :--- |
| Male to female ratio | $3: 1$ |
| Mean age (SD, min-max) | $15.5(4.8,10-20)$ <br>  <br>  <br> Mean tumor size $12.0(5.0,6-17)$ at the time of the disaster |

2.2-2 Suspicious or malignant cases on FNAC by age and sex


Fig. 3 Age as of 11 March 2011


Fig. 4 Age as the date of confirmatory examination
2.2-3 Suspicious or malignant cases on FNAC by estimated radiation dose

Three of the 4 cases $(75.0 \%)$ participated in the Basic Survey (radiation dose estimates) and have received the results. Among those, 1 had estimated radiation exposure dose below 1 mSv , and the highest effective dose was 2.1 mSv.

Table 6. Number of suspicious or malignant cases by age and sex
As of 31 October 2014

| Effective dose <br> $(\mathrm{mSv})$ | Sex | Age at the time of disaster |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  |  | $0-5$ | $6-10$ | $11-15$ | $16-18$ | Total |
| $<0.5$ | Male | 0 | 0 | 0 | 0 | 0 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| $0.5-1.0$ | Male | 0 | 1 | 0 | 0 | 1 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| $1.0-1.5$ | Male | 0 | 0 | 0 | 1 | 1 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| $1.5-2.0$ | Male | 0 | 0 | 0 | 0 | 0 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| $2.0-2.5$ | Male | 0 | 1 | 0 | 0 | 1 |
|  | Female | 0 | 0 | 0 | 0 | 0 |
| Total | Male | 0 | 2 | 0 | 1 | 3 |
|  | Female | 0 | 0 | 0 | 0 | 0 |



Fig. 5 Effective dose of the respondents

## 2.2-4 Blood and urinary iodine test results as of 31 October 2014

Table 7. Blood test results Mean $\pm$ SD (Abnormality ratio)

|  | FT4 1) <br> (ng/dL) | FT3 2) <br> ( $\mathrm{pg} / \mathrm{mL}$ ) | TSH 3) <br> ( $\mu \mathrm{IU} / \mathrm{mL}$ ) | $\operatorname{Tg} 4)$ ( $\mathrm{ng} / \mathrm{mL}$ ) | TgAb 5) <br> (IU/mL) | $\text { TPOAb } 6)$ <br> (IU/mL) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reference Range | 0.95-1.74 | 2.13-4.07 7) | 0.340-3.880 | $\leq 32.7$ | <28.0 | <16.0 |
| 4 suspicious or malignant | $1.3 \pm 0.1(0.0 \%)$ | $3.8 \pm 0.6(0.0 \%)$ | $2.4 \pm 1.2(0.0 \%)$ | $62.2 \pm 64.6(50.0 \%)$ | - (0.0\%) | - (25.0\%) |
| Other 150 | $1.2 \pm 0.1(6.7 \%)$ | $3.7 \pm 0.5(4.7 \%)$ | $1.5 \pm 1.0(9.3 \%)$ | $20.3 \pm 41.4(9.3 \%)$ | - (12.7\%) | - (10.0\%) |

Table 8. Urinary iodine ( $\mu \mathrm{g} /$ day)

|  | Minimum | 25th percentile | Median | 75th percentile |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 4 Maxpicious or malignant | 61 | 76.5 | 139.5 | 556.5 | 178 |
| Other 150 | 38 | 119 | 372 |  |  |

1) FT4: Free Thyroxine; higher among patients with Graves' disease and lower with Hashimoto's disease.
2) FT3: Free Triiodothyronine; higher among patients with Graves' disease and lower with Hashimoto's disease.
3) TSH: Thyroid Stimulating Hormone; higher among patients with Hashimoto's disease and lower with Graves' disease.
4) Tg : Thyroglobulin; higher when thyroid tissue is destroyed or when thyroid cancer produces thyroglobulin.
5) $\operatorname{Tg} \mathrm{Ab}$ : Anti-Thyroglobulin Antibody; higher among patients with Hashimoto's disease and Graves' disease
6) TPOAb: Anti-Thyroid Peroxidase Antibody; higher among patients with Hashimoto's disease or Graves' disease.
7) Reference range differs according to age.

## 2.2-5 Confirmatory test results by municipality as of 31 October 2014

The proportion of suspicious or malignant is $0.00 \%$ in FY 2014 target municipalities ( 13 municipalities in the nationally designated evacuation zones and 12 towns of the Kempoku area), $0.00 \%$ in FY 2015 target municipalities ( 34 towns of the Iwaki, Kennan, and Aizu areas).

Table 9.
Confirmatory test results in FY 2014

|  | Number of <br> children <br> screned | Number who <br> required <br> confirmatory test | Proportion who <br> required <br> confrmatry test <br> $(\%)$ | Number who <br> underwent <br> confirmatory test | Suspicious or <br> malignant cases | Proportion of <br> suspicious or <br> malignant cases <br> $(\%)$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Kawamata | 1,664 | 19 | 1.1 | 14 | 0 | 0.00 |
| Namie | 1,829 | 17 | 0.9 | 10 | 0 | 0.00 |
| Iitate | 682 | 10 | 1.5 | 6 | 0 | 0.00 |
| Minami-soma | 7,375 | 55 | 0.7 | 37 | 0 | 0.00 |
| Date | 8,592 | 65 | 0.8 | 50 | 1 | 0.01 |
| Tamura | 4,031 | 33 | 0.8 | 21 | 1 | 0.02 |
| Hirono | 485 | 7 | 1.4 | 6 | 0 | 0.00 |
| Naraha | 703 | 4 | 0.6 | 3 | 0 | 0.00 |
| Tomioka | 1,184 | 13 | 1.1 | 8 | 0 | 0.00 |
| Kawauchi | 146 | 0 | 0.0 | 0 | 0 | 0.00 |
| Okuma | 1,224 | 6 | 0.5 | 5 | 1 | 0.08 |
| Futaba | 433 | 2 | 0.5 | 0 | 0 | 0.00 |
| Katsurao | 90 | 1 | 1.1 | 1 | 0 | 0.00 |
| Fukushima | 39,568 | 214 | 0.5 | 81 | 1 | 0.00 |
| Nihonmatsu | 7,196 | 5 | 0.1 | 2 | 0 | 0.00 |
| Motomiya | 4,028 | 0 | 0.0 | 0 | 0 | 0.00 |
| Otama | 1,131 | 0 | 0.0 | 0 | 0 | 0.00 |
| Koriyama | 509 | 0 | 0.0 | 0 | 0 | 0.00 |
| Kori | 332 | 0 | 0.0 | 0 | 0 | 0.00 |
| Kunimi | 274 | 1 | 0.4 | 0 | 0 | 0.00 |
| Tenei | 7 | 0 | 0.0 | 0 | 0 | 0.00 |
| Shirakawa | 24 | 0 | 0.0 | 0 | 0 | 0.00 |
| Nishigo | 11 | 0 | 0.0 | 0 | 0 | 0.00 |
| Izumizaki | 1 | 0 | 0.0 | 0 | 0 | 0.00 |
| Miharu | 102 | 3 | 2.9 | 2 | 0.00 |  |
| Subtotal | 81,621 | 455 | 0.6 | 246 | 0 | 0 |

Confirmatory test results in FY 2015

| Subtotal | 480 | 2 | 0.4 | 2 | 0 | 0.00 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |


| Total | 82,101 | 457 | 0.6 | 248 | 4 | 0.00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

FY 2014 is from 1 April 2014 through 31 March 2015
FY 2015 is from 1 April 2015 through 31 March 2016

## Appendix 1

Thyroid Ultrasound Examination (TUE) coverage by municipality

| Target Population | Participants |  | Proportion (\%) | Number and proportion of participants by age group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Screened outside Fukushima 3) |  |  |  |  |  |
| a | b |  | b/a | 2-7 | 8-12 | 13-17 | 18-22 |


| As of 31 October 2014 |  |
| :---: | :---: |
| Participants <br> living outside <br> Fukushima | Proportion <br> $(\%)$ |
| c | $\mathrm{c} / \mathrm{b}$ |



| 44 | 2.6 |
| ---: | ---: |
| 582 | 31.8 |


| Namie | 3,771 | 1,829 |
| :---: | ---: | ---: |
| Iitate | 1,123 | 682 |


| Minami-soma | 12,981 | 7,375 | 1,390 | 56.8 | 1,902 | 2,578 | 2,276 | 619 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 25.8 | 35.0 | 30.9 | 8.4 |
| Date | 11,737 | 8,592 | 247 | 73.2 | 2,132 | 2,706 | 2,918 | 836 |
|  |  |  |  |  | 24.8 | 31.5 | 34.0 | 9.7 |
| Tamura | 7,321 | 4,031 | 109 | 55.1 | 1,015 | 1,582 | 1,188 | 246 |
|  |  |  |  |  |  |  |  |  |


| 44 | 2.6 |
| :--- | :--- |


| Tamura | 7,321 | 4,031 | 109 | 55.1 | 1,015 | 1,582 | 1,188 | 246 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 25.2 | 39.2 | 29.5 | 6.1 |
| Hirono | 1,108 | 485 | 87 | 43.8 | 139 | 156 | 135 | 55 |
|  |  |  |  |  | 28.7 | 32.2 | 27.8 | 11.3 |
| Naraha | 1,488 | 703 | 107 | 47.2 | 196 | 215 | 213 | 79 |
|  |  |  |  |  | 27.9 | 30.6 | 30.3 | 11.2 |


| 102 | 2.5 |
| ---: | ---: |
| 83 | 17.1 |
| 114 | 16.2 |


|  |  | 1,184 |  |  | 27.9 | 30.6 | 30.3 | 11.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tomioka | 3,101 |  | 310 | 38.2 | 330 | 330 | 347 | 177 |
|  |  |  |  |  | 27.9 | 27.9 | 29.3 | 14.9 |
| Kawauchi | 360 | 146 | 14 | 40.6 | 41 | 57 | 37 | 11 |
|  |  |  |  |  | 28.1 | 39.0 | 25.3 | 7.5 |
|  |  |  |  |  | 411 | 386 | 313 | 114 |


| 114 | 16.2 |
| ---: | ---: |
| 350 | 29.6 |
| 16 | 11.0 |


| Okuma | 2,498 |
| :---: | ---: |
| Futaba | 1,258 |


|  | 1,258 | 433 | 187 | 34.4 |
| ---: | ---: | ---: | ---: | ---: |
| Katsurao | 240 | 90 | 13 | 37.5 |
| Fukushima | 55,732 | 39.568 | 1.586 |  |


| Fukushima | 55,732 | 39,568 | 1,586 | 71.0 |
| :---: | ---: | ---: | ---: | ---: |
| Nihonmatsu | 10,595 | 7,196 | 74 | 67.9 |


| Motomiya | 6,342 | 4,028 | 36 | 63.5 | 1,074 | 1,421 | 1,239 | 294 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 26.7 | 35.3 | 30.8 | 7.3 |
| Otama | 1,684 | 1,131 | 3 | 67.2 | 325 | 391 | 326 | 89 |
|  |  |  |  |  | 28.7 | 34.6 | 28.8 | 7.9 |
| Koriyama | 66,204 | 509 | 4 | 0.8 | 71 | 105 | 275 | 58 |
|  |  |  |  |  | 13.9 | 20.6 | 54.0 | 11.4 |
| Kori | 2,136 | 332 | 3 | 15.5 | 12 | 21 | 269 | 30 |
|  |  |  |  |  | 3.6 | 6.3 | 81.0 | 9.0 |
| Kunimi | 1,624 | 274 | 0 | 16.9 | 5 | 22 | 219 | 28 |
|  |  |  |  |  | 1.8 | 8.0 | 79.9 | 10.2 |
| Tenei | 1,101 | 7 | 0 | 0.6 | 1 | 3 | 1 | 2 |
|  |  |  |  |  | 14.3 | 42.9 | 14.3 | 28.6 |
| Shirakawa | 12,671 | 24 | 0 | 0.2 | 8 | 4 | 10 | 2 |
|  |  |  |  |  | 33.3 | 16.7 | 41.7 | 8.3 |
| Nishigo | 4,161 | 11 | 1 | 0.3 | 0 | 3 | 6 | 2 |
|  |  |  |  |  | 0.0 | 27.3 | 54.5 | 18.2 |
| Izumizaki | 1,337 | 1 | 0 | 0.1 | 0 | 1 | 0 | 0 |
|  |  |  |  |  | 0.0 | 100.0 | 0.0 | 0.0 |
| Miharu | 3,155 | 102 | 1 | 3.2 | 9 | 28 | 61 | 4 |
|  |  |  |  |  | 8.8 | 27.5 | 59.8 | 3.9 |
| Subtotal | 216,189 | 81,621 | 5,057 | 37.8 | 20,297 | 26,231 | 26,813 | 8,280 |
|  |  |  |  |  | 24.9 | 32.1 | 32.9 | 10.1 |



Screening coverage by municipality in FY 2015

| Subtotal | 480 | 480 | 4 | 100.0 | 71 | 141 | 237 | 31 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Total |  | 216,669 | 82,101 | 5,061 | 14.8 | 29.4 | 49.4 | 6.5 |



1) Number of participants. 2) Number of participants in the age group/Number of participants.
2) Number of participants who underwent the test outside Fukushima.

Fractions have been rounded and may not total to $100 \%$. Ages are at the time when the participants underwent the testing.

## Appendix 2

Thyroid Ultrasound Examination (TUE) coverage by prefecture
As of 31 October 2014

| Prefecture | Number of <br> test venues | Participants |
| :---: | ---: | ---: |
| Hokkaido | 4 | $\mathbf{9 2}$ |
| Aomori | 1 | $\mathbf{5 8}$ |
| Iwate | 3 | $\mathbf{1 0 5}$ |
| Miyagi | 2 | $\mathbf{1 , 2 1 5}$ |
| Akita | 1 | $\mathbf{8 9}$ |
| Yamagata | 3 | $\mathbf{4 3 1}$ |
| Ibaraki | 4 | $\mathbf{3 1 5}$ |
| Tochigi | 5 | $\mathbf{3 2 5}$ |
| Gunma | 1 | $\mathbf{9 0}$ |
| Saitama | 1 | $\mathbf{1 5 4}$ |
| Chiba | 3 | $\mathbf{2 1 2}$ |
| Tōkyō | 12 | $\mathbf{5 7 9}$ |
| Kanagawa | 4 | $\mathbf{3 5 6}$ |
| Niigata | 1 | $\mathbf{4 6 7}$ |
| Toyama | 1 | $\mathbf{5}$ |
| Ishikawa | 1 | $\mathbf{2 9}$ |


| Prefecture | Number of <br> test venues | Participants |
| :---: | ---: | ---: |
| Fukui | 1 | $\mathbf{8}$ |
| Yamanashi | 1 | $\mathbf{7 6}$ |
| Nagano | 2 | $\mathbf{2 9}$ |
| Gifu | 1 | $\mathbf{1 3}$ |
| Shizuoka | 2 | $\mathbf{6 1}$ |
| Aichi | 3 | $\mathbf{5 9}$ |
| Mie | 1 | $\mathbf{1 1}$ |
| Shiga | 1 | $\mathbf{2}$ |
| Kyōto | 3 | $\mathbf{2 0}$ |
| Ōsaka | 6 | $\mathbf{5 0}$ |
| Hyōgo | 1 | $\mathbf{3 8}$ |
| Nara | 1 | $\mathbf{9}$ |
| Wakayama | 1 | $\mathbf{2}$ |
| Tottori | 1 | $\mathbf{7}$ |
| Shimane | 1 | $\mathbf{3}$ |
| Okayama | 3 | $\mathbf{1 9}$ |


| Prefecture | Number of <br> test venues | Participants |
| :---: | ---: | ---: |
| Hiroshima | 1 | $\mathbf{4}$ |
| Yamaguchi | 1 | $\mathbf{8}$ |
| Tokushima | 1 | $\mathbf{4}$ |
| Kagawa | 1 | $\mathbf{7}$ |
| Ehime | 1 | $\mathbf{1}$ |
| Kōchi | 1 | $\mathbf{3}$ |
| Fukuoka | 2 | $\mathbf{2 8}$ |
| Saga | 1 | $\mathbf{1 0}$ |
| Nagasaki | 2 | $\mathbf{1 0}$ |
| Kumamoto | 1 | $\mathbf{2}$ |
| Ōita | 1 | $\mathbf{1 7}$ |
| Miyazaki | 1 | $\mathbf{1 5}$ |
| Kagoshima | 1 | $\mathbf{1 2}$ |
| Okinawa | 1 | $\mathbf{1 1}$ |
| Total | 92 | $\mathbf{5 , 0 6 1}$ |

Participants underwent testing at venues outside Fukushima carried out either by Fukushima Medical University staff (once in Niigata,
Kanagawa, and Yamagata respectively) or by local specialists.

## Appendix 3

| Results of primary examination by municipality |  |  |  |  |  |  |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Participants | $\begin{gathered} \text { Number } \\ \text { confirmed } \\ \text { b } \end{gathered}$ | Number by test results |  |  |  | Nodules |  | Cysts |  |
|  |  |  | Proportion (\%) |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Proportion (\%) } \\ \text { b/a (\%) } \\ \hline \end{gathered}$ | A |  | B | C | Proportion (\%) |  | Proportion (\%) |  |
|  |  |  | A1 | A2 |  |  | $\geq 5.1 \mathrm{~mm}$ | $\leq 5.0 \mathrm{~mm}$ | $\geq 20.1 \mathrm{~mm}$ | $\leq 20.0 \mathrm{~mm}$ |

Screening coverage by municipality in FY 2014

| Kawamata | 1,664 | 1,535 | 685 | 831 | 19 | 0 | 18 | 11 | 1 | 839 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 92.2 | 44.6 | 54.1 | 1.2 | 0.0 | 1.2 | 0.7 | 0.1 | 54.7 |


| Namie | 1,829 |  |
| :---: | ---: | ---: |
| Iitate | 682 |  |
|  |  |  |


| Iitate | 682 | 6 | 97 | 3 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 91.6 | 47.5 | 50.9 | 1.6 | 0.0 | 1.6 | 0.3 | 0.0 | 51.2 |
| Minami-soma | 7,375 | 7,200 | 3,089 | 4,056 | 55 | 0 | 55 | 49 | 0 | 4,071 |
|  |  | 97.6 | 42.9 | 56.3 | 0.8 | 0.0 | 0.8 | 0.7 | 0.0 | 56.5 |
| Date | 8,592 | 7,923 | 3,424 | 4,434 | 65 | 0 | 65 | 55 | 0 | 4,457 |
|  |  | 92.2 | 43.2 | 56.0 | 0.8 | 0.0 | 0.8 | 0.7 | 0.0 | 56.3 |


| Tamura | 4,031 | 4,007 | 1,646 | 2,328 | 33 | 0 | 33 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 99.4 | 41.1 | 58.1 | 0.8 | 0.0 | 0.8 |
| Hirono | 485 | 478 | 209 | 262 | 7 | 0 | 7 |
|  |  | 98.6 | 43.7 | 54.8 | 1.5 | 0.0 | 1.5 |


| Naraha | 703 | 687 | 290 | 393 | 4 | 0 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 97.7 | 42.2 | 57.2 | 0.6 | 0.0 | 0.6 |
| Tomioka | 1,184 | 1,120 | 486 | 621 | 13 | 0 | 13 |
|  |  | 94.6 | 43.4 | 55.4 | 1.2 | 0.0 | 1.2 |
|  |  | 145 | 44 | 101 | 0 | 0 | 0 |


| Kawauchi | 146 |
| :---: | ---: |
| Okuma | 1,224 |
|  |  |
| Futaba |  |


| Futaba | 433 |
| :---: | ---: |
| Katsurao | 90 |


| Fukushima |  |
| :---: | ---: |
|  | 79,568 |
|  | 7,196 |
|  |  |


| Ninormatsu | 7,196 | 4.4 | 36.6 | 61.9 | 1.6 | 0.0 | 1.6 | 0.9 | 0.0 | 62.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Motomiya | 4,028 | 51 | 21 | 30 | 0 | 0 | 0 | 0 | 0 | 30 |
|  |  | 1.3 | 41.2 | 58.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 58.8 |
| Otama | 1,131 | 13 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
|  |  | 1.1 | 38.5 | 61.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 61.5 |
| Koriyama | 509 | 192 | 81 | 111 | 0 | 0 | 0 | 2 | 0 | 111 |
|  |  | 37.7 | 42.2 | 57.8 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 57.8 |
| Kori | 332 | 195 | 80 | 115 | 0 | 0 | 0 | 1 | 0 | 115 |
|  |  | 58.7 | 41.0 | 59.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 59.0 |
| Kunimi | 274 | 144 | 47 | 96 | 1 | 0 | 1 | 1 | 0 | 96 |
|  |  | 52.6 | 32.6 | 66.7 | 0.7 | 0.0 | 0.7 | 0.7 | 0.0 | 66.7 |
| Tenei | 7 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
|  |  | 42.9 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 66.7 |
| Shirakawa | 24 | 15 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
|  |  | 62.5 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 |
| Nishigo | 11 | 5 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
|  |  | 45.5 | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 80.0 |
| Izumizaki | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
|  |  | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Miharu | 102 | 100 | 38 | 59 | 3 | 0 | 3 | 0 | 0 | 62 |
|  |  | 98.0 | 38.0 | 59.0 | 3.0 | 0.0 | 3.0 | 0.0 | 0.0 | 62.0 |
| Subtotal | 81,621 | 60,110 | 25,418 | 34,237 | 455 | 0 | 453 | 358 | 1 | 34,388 |
|  |  | 73.6 | 42.3 | 57.0 | 0.8 | 0.0 | 0.8 | 0.6 | 0.0 | 57.2 |

Screening coverage by municipality in FY 2015

| Subtotal | 480 | 395 | 145 | 248 | 2 | 0 | 2 | 2 | 0 | 247 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 82.3 | 36.7 | 62.8 | 0.5 | 0.0 | 0.5 | 0.5 | 0.0 | 62.5 |
| Total | 82,101 | 60,505 | 25,563 | 34,485 | 457 | 0 | 455 | 360 | 1 | 34,635 |
|  |  | 73.7 | 42.2 | 57.0 | 0.8 | 0.0 | 0.8 | 0.6 | 0.0 | 57.2 |

Fractions have been rounded and may not total to $100 \%$.

## Appendix 4

1. Thyroid Ultrasound Examination results by age and sex

| - | A |  |  |  |  |  | B |  |  | C |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ages | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 2-7 | 5,100 | 4,533 | 9,633 | 3,169 | 3,333 | 6,502 | 3 | 7 | 10 | 0 | 0 | 0 | 8,272 | 7,873 | 16,145 |
| 8-12 | 4,048 | 3,446 | 7,494 | 6,931 | 6,913 | 13,844 | 31 | 61 | 92 | 0 | 0 | 0 | 11,010 | 10,420 | 21,430 |
| 13-17 | 3,518 | 2,663 | 6,181 | 5,595 | 5,476 | 11,071 | 75 | 146 | 221 | 0 | 0 | 0 | 9,188 | 8,285 | 17,473 |
| 18-22 | 1,081 | 1,174 | 2,255 | 1,322 | 1,746 | 3,068 | 43 | 91 | 134 | 0 | 0 | 0 | 2,446 | 3,011 | 5,457 |
| Total | 13,747 | 11,816 | 25,563 | 17,017 | 17,468 | 34,485 | 152 | 305 | 457 | 0 | 0 | 0 | 30,916 | 29,589 | 60,505 |




Percentages have been rounded and may not total to $100 \%$.
Ages are at the time when the participants underwent the testing.

## 2. Nodule size

|  |  |  |  | As of 31 October 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nodule size | Total |  |  | Test result | Proportion |
|  |  | Male | Female |  |  |
| None | 59,690 | 30,612 | 29,078 | A1 | 98.7\% |
| $\leq 3.0 \mathrm{~mm}$ | 77 | 36 | 41 | A2 | 0.6\% |
| $3.1-5.0 \mathrm{~mm}$ | 283 | 117 | 166 |  |  |
| $5.1-10.0 \mathrm{~mm}$ | 347 | 116 | 231 | B | 0.8\% |
| $10.1-15.0 \mathrm{~mm}$ | 63 | 22 | 41 |  |  |
| 15.1-20.0 mm | 30 | 11 | 19 |  |  |
| $20.1-25.0 \mathrm{~mm}$ | 8 | 2 | 6 |  |  |
| $\geq 25.1 \mathrm{~mm}$ | 7 | 0 | 7 |  |  |
| Total | 60,505 | 30,916 | 29,589 | , |  |




## 3. Cyst size

| Cyst size | Total |  |  | Class | \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |  |
| None | 25,869 | 13,855 | 12,014 | A1 | 79.8\% |
| $\leq 3.0 \mathrm{~mm}$ | 22,395 | 11,633 | 10,762 | A2 |  |
| $3.1-5.0 \mathrm{~mm}$ | 10,814 | 4,919 | 5,895 |  | 20.2\% |
| $5.1-10.0 \mathrm{~mm}$ | 1,396 | 500 | 896 |  |  |
| $10.1-15.0 \mathrm{~mm}$ | 27 | 6 | 21 |  |  |
| $15.1-20.0 \mathrm{~mm}$ | 3 | 2 | 1 |  |  |
| 20.1-25.0 mm | 0 | 0 | 0 | B | 0.002\% |
| $\geq 25.1 \mathrm{~mm}$ | 1 | 1 | 0 |  |  |
| Total | 60,505 | 30,916 | 29,589 | - |  |




## Appendix 5



Screening coverage by municipality in FY 2014

| Kawamata | 1,664 | 19 | 14 | 0 | 3 | 9 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.1 | 73.7 | 0.0 | 21.4 | 64.3 | 14.3 |
| Namie | 1,829 | 17 | 10 | 0 | 0 | 3 | 7 |
|  |  | 0.9 | 58.8 | 0.0 | 0.0 | 30.0 | 70.0 |
| Iitate | 682 | 10 | 6 | 0 | 2 | 3 | 1 |
|  |  | 1.5 | 60.0 | 0.0 | 33.3 | 50.0 | 16.7 |
| Minami-soma | 7,375 | 55 | 37 | 1 | 7 | 22 | 7 |
|  |  | 0.7 | 67.3 | 2.7 | 18.9 | 59.5 | 18.9 |
| Date | 8,592 | 65 | 50 | 1 | 17 | 29 | 3 |
|  |  | 0.8 | 76.9 | 2.0 | 34.0 | 58.0 | 6.0 |
| Tamura | 4,031 | 33 | 21 | 1 | 2 | 15 | 3 |
|  |  | 0.8 | 63.6 | 4.8 | 9.5 | 71.4 | 14.3 |
| Hirono | 485 | 7 | 6 | 0 | 1 | 3 | 2 |
|  |  | 1.4 | 85.7 | 0.0 | 16.7 | 50.0 | 33.3 |
| Naraha | 703 | 4 | 3 | 0 | 0 | 0 | 3 |
|  |  | 0.6 | 75.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Tomioka | 1,184 | 13 | 8 | 0 | 1 | 2 | 5 |
|  |  | 1.1 | 61.5 | 0.0 | 12.5 | 25.0 | 62.5 |
| Kawauchi | 146 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Okuma | 1,224 | 6 | 5 | 0 | 0 | 3 | 2 |
|  |  | 0.5 | 83.3 | 0.0 | 0.0 | 60.0 | 40.0 |
| Futaba | 433 | 2 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Katsurao | 90 | 1 | 1 | 0 | 1 | 0 | 0 |
|  |  | 1.1 | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Fukushima | 39,568 | 214 | 81 | 2 | 21 | 49 | 9 |
|  |  | 0.5 | 37.9 | 2.5 | 25.9 | 60.5 | 11.1 |
| Nihonmatsu | 7,196 | 5 | 2 | 0 | 0 | 1 | 1 |
|  |  | 0.1 | 40.0 | 0.0 | 0.0 | 50.0 | 50.0 |
| Motomiya | 4,028 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Otama | 1,131 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Koriyama | 509 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kori | 332 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kunimi | 274 | 1 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Tenei | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Shirakawa | 24 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Nishigo | 11 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Izumizaki | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Miharu | 102 | 3 | 2 | 0 | 0 | 2 | 0 |
|  |  | 2.9 | 66.7 | 0.0 | 0.0 | 100.0 | 0.0 |
| Subtotal | 81,621 | 455 | 246 | 5 | 55 | 141 | 45 |
|  |  | 0.6 | 54.1 | 2.0 | 22.4 | 57.3 | 18.3 |


| 12 | 3 | 4 | 5 | 1 |
| ---: | ---: | ---: | ---: | ---: |
| 85.7 | 25.0 | 33.3 | 41.7 | 20.0 |
| 7 | 0 | 2 | 5 | 0 |

$$
0
$$

| 7 | 0 | 2 | 5 | 0 |
| ---: | ---: | ---: | ---: | ---: |
| 70.0 | 0.0 | 28.6 | 71.4 | 0.0 |
| 6 | 1 | 2 | 3 | 1 |
|  | 100.0 | 16.7 | 33.3 | 50.0 |


| 100.0 | 16.7 | 33.3 | 50.0 | 33.3 |
| ---: | ---: | ---: | ---: | ---: |
| 26 | 2 | 5 | 19 | 2 |
| 70.3 | 7.7 | 19.2 | 73.1 | 10.5 |
| 36 | 0 | 19 | 17 | 2 |
| 72.0 | 0.0 | 52.8 | 47.2 | 11.8 |


| 17 | 1 | 8 | 8 | 1 |
| :---: | :---: | ---: | ---: | ---: |
| 81.0 | 5.9 | 47.1 | 47.1 | 12.5 |
| 6 | 0 | 3 | 3 | 0 |
| 100.0 | 0.0 | 50.0 | 50.0 | 0.0 |
| 2 | 0 | 0 | 2 | 0 |

Screening coverage by municipality in FY 2015

| Subtotal | 480 | 2 | 2 | 0 | 0 | 2 | 0 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | 0.4 | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 |
| Total | 82,101 | 457 | 248 | 5 | 55 | 143 | 45 |
|  |  | 0.6 | 54.3 | 2.0 | 22.2 | 57.7 | 18.1 |


| 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| 155 | 9 | 53 | 93 | 11 |
| :---: | :---: | :---: | :---: | :---: |
| 62.5 | 5.8 | 34.2 | 60.0 | 11.8 |

h) Excluding participants who have not receive the test results.

Ages are at the time when the participants underwent the testing.

## Progress Report of the Comprehensive Health Check

Reported on 25 December 2014

## 1. The implementation status in FY 2013

- Results of FY 2013

Progress Report of the Comprehensive Health Check for FY 2011 to FY 2013


## <Chart>

A) Children's health examination within the prefecture
B) Children's health examination outside the prefecture
C) Number of overlapping examinees within and outside the prefecture
D) Subtotal (excluding the number of overlapping examinees)
E) Health Check conducted by municipalities within the prefecture
F) Individual examinations conducted within the prefecture
G) Group examinations conducted within the prefecture
H) Individual examinations conducted outside the prefecture
I)

Other (within the prefecture (cases where the municipality delegated examination to medical institutions or county/city medical associations))
Other (outside the prefecture (cases where the municipality delegated examination to examination agencies))
J) Number of overlapping examinees within and outside the prefecture
K) Subtotal (Excluding the number of overlapping examinees)
L) Total (Excluding the number of overlapping examinees)

## 【People residing within the prefecture】

For those aged 16 and older，items were added to specific health examinations held by municipalities so that the existing health examination and Comprehensive Health Check for the prefectural health survey may be conducted simultaneously．Furthermore，group health examinations were conducted 69 times at around 24 locations within the prefecture for those who could not undergo the check－ups．Also，around the same time period as the group health examinations， 510 facilities cooperated with us in order to set up a system that will allow medical facilities within the prefecture to conduct health examinations．
For children 15 and under，we requested the cooperation of pediatricians so that children＇s needs could be accommodated，and health examinations were conducted at 104 medical institutions within the prefecture．

## 【People evacuating outside the prefecture】

Taking into account the fact that people had evacuated to various locations in the country，health examinations were conducted with the cooperation of a total of 951 medical institutions outside the prefecture．The breakdown of institutions that cooperated is as follows： 453 medical institutions for those 16 and older；and 133 medical institutions that include a pediatric department for those 15 and under as was the case within the prefecture．Furthermore，we received cooperation from 365 medical institutions that can accommodate both age groups．

## －The medical examination consultation rate

The medical examination consultation rate for those 16 and older in FY 2013 was $23.0 \%$ ．Compared to $30.9 \%$ in FY 2011 and $25.4 \%$ in FY 2012，it has decreased by 7.9 points and 2.4 points，respectively． Similarly，the medical examination consultation rate for those 15 and under was $38.7 \%$ ，which has decreased by 25.8 points and 4.8 points，respectively，compared to $64.5 \%$ in FY 2011 and $43.5 \%$ in FY 2012.

## 2．Implementation status of FY 2014

Group：214，211individuals
（25，883 individuals aged 15 and under，188，328 individuals aged 16 and older）


[^4]
## －Implementation status for FY 2014

## 【People residing within the prefecture】

For children 15 and under，the health exams are being conducted during an approximately 6 month period from Jul to Dec 2014 as was the case in the previous year（Number of cooperating medical institutions： 101 facilities）．The number of examinees at this point is 5,504 ．
For those 16 and older，items are added to specific health check－ups held by municipalities as before，so that examinations can be simultaneously conducted in 12 municipalities except Date city．Furthermore，we plan to conduct group health examinations and individual health examinations at medical institutions．The number of examinees who are 16 and older is 21,943 at this point．

## 【People who had evacuated outside the prefecture】

In addition to increasing the number of medical institutions that can conduct health examinations nationwide，we have sequentially sent out notices from mid－July in order to ensure early implementation starting from August．Furthermore，we will make efforts to gain cooperation from medical institutions located near regions where a significant number of people had evacuated．

# FY 2011－2013 Comprehensive Health Check of Fukushima Health Management Survey Consultation results basic statistics chart by health examination item 

Reported on 25 December 2014
Revised on 2 February 2015
The results of FY 2011 and FY 2012 are the corrected version of the Proceedings of the $13^{\text {th }}$ Prefectural Oversight Committee Meeting for Fukushima Health Management Survey．

## 【Group】

Residents of nationally designated evacuation zones as of 2011 and those who were recommended to have follow－up based on the results of the Basic Survey．

【Evacuation area，etc．】
Whole area of Tamura city，Minami－soma city，Kawamata town，Hirono town，Naraha town， Tomioka town，Kawauchi village，Okuma town，Futaba town，Namie town，Katsurao village，Iitate village and parts of Date City（belonging to designated evacuation areas）

【Examination item】

| Age Division | Examination Item |
| :---: | :---: |
| 0－6 years old（Infant before entering school） | Height，weight，CBC（Number of red blood cells， hematocrit，hemoglobin，platelet count，number of white blood cells，differential white blood count．） |
| $7-15$ years old（From $1^{\text {st }}$ to $9^{\text {th }}$ grade） | Height，weight，blood pressure， <br> CBC（Number of red blood cells，hematocrit，hemoglobin， platelet count，number of white blood cells，differential white blood count．） <br> ［Additional items on request］ <br> Blood biochemistry（AST，ALT，$\gamma$ GT，TG，HDL－C，LDL－C， HbA1c，plasma glucose，serum creatinine，uric acid） |
| 16 years old and above | Height，weight，BMI（abdominal circumference），blood pressure <br> CBC（Number of red blood cells，hematocrit，hemoglobin， platelet count，number of white blood cells，differential white blood count．） <br> Urinary test（urinary sugar，urine protein，urine occult blood） <br> Blood biochemistry（AST，ALT，$\gamma$ GT，TG，HDL－C，LDL－C， HbA1c，plasma glucose，serum creatinine，estimated |


|  | glomerular filtration rate [eGFR], uric acid) <br> The underlined values are not routinely measured during <br> regular health exams. |
| :--- | :--- |

※Medical examination results are divided into general age categories and, due to differences in medical checkup items, also divided into 5 age groups: 0-6 years old, 7-15 years old, 16-39 years old, 40-64 years old and 65 years old and above. This is further paired with 2 categories resulting in 10 categories, and the results were compiled for each medical checkup item.
※Individuals who received examination at least twice in the same year (repeated medical examinee) have been included in the total results.
※Symbols in the tables are represented in the same way as in Vital Statistics of the Ministry of Health, Labour and Welfare.
When there are no figures (-)
When there are no items (no medical checkup items due to age category) (•)
When it is not appropriate to express the total (...)
When the percentage is small (less than 0.05) ( $0.0 \%$ )
※A statistical analysis has not been conducted.
※There are no significant changes in the health examination targets of FY 2011-2013. Since the medical examinees differ, the time of receiving the medical examination and the medical organizations differ. Due to such modifying factors, this is not a strict comparison.

Height
FY 2011

| Height (cm) (overall) |  |  |  |  |  |
| ---: | :--- | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | of | Average age | Average height |  |
| $0-6$ | 6,461 | 3.6 | 98.5 |  |  |
| $7-15$ | 11,479 | 11.0 | 144.1 |  |  |
| $16-39$ | 14,762 | 28.1 | 163.2 |  |  |
| $40-64$ | 23,637 | 54.0 | 160.0 |  |  |
| $65-$ | 16,718 | 73.7 | 153.5 |  |  |


| Height (cm) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | 150 cm <br> below | 170 cm <br> above |  |
| $0-6$ | 3,271 | 3.6 | 99.2 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 5,766 | 10.9 | 145.1 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 5,963 | 27.7 | 170.9 | $0.2 \%$ | $57.1 \%$ |  |
| $40-64$ | 9,560 | 54.5 | 167.5 | $0.4 \%$ | $34.2 \%$ |  |
| $65-$ | 7,498 | 73.4 | 160.8 | $3.9 \%$ | $6.7 \%$ |  |


| Height (cm) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | $140 \quad \mathrm{~cm}$ <br> below | $160 \quad \mathrm{~cm}$ <br> above |  |
| $0-6$ | 3,190 | 3.6 | 97.7 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 5,713 | 11.0 | 143.0 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 8,799 | 28.3 | 158.0 | $0.1 \%$ | $36.4 \%$ |  |
| $40-64$ | 14,077 | 53.7 | 154.9 | $0.4 \%$ | $18.4 \%$ |  |
| $65-$ | 9,220 | 73.8 | 147.6 | $10.7 \%$ | $1.6 \%$ |  |

FY 2012

| Height (cm) (overall) |  |  |  |  |
| ---: | :--- | ---: | :--- | :--- |
| Age | Number <br> examinees | of | Average age | Average height |
| $0-6$ | 4,364 | 3.6 | 96.3 |  |
| $7-15$ | 7,437 | 10.9 | 142.3 |  |
| $16-39$ | 8,480 | 28.6 | 163.3 |  |
| $40-64$ | 19,552 | 55.0 | 159.9 |  |
| $65-$ | 18,632 | 73.5 | 154.0 |  |


| Height (cm) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | $150 \quad \mathrm{~cm}$ <br> below | $170 \quad \mathrm{~cm}$ <br> above |  |
| $0-6$ | 2,174 | 3.6 | 97.0 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 3,810 | 10.8 | 143.1 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 3,230 | 27.9 | 171.3 | $0.3 \%$ | $59.2 \%$ |  |
| $40-64$ | 7,716 | 55.4 | 167.5 | $0.3 \%$ | $34.6 \%$ |  |
| $65-$ | 8,475 | 73.4 | 161.1 | $3.9 \%$ | $7.6 \%$ |  |


| Height (cm) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | 140 cm <br> below | $160 \quad \mathrm{~cm}$ <br> above |  |
| $0-6$ | 2,190 | 3.6 | 95.5 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 3,627 | 10.9 | 141.4 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 5,250 | 29.1 | 158.3 | $0.1 \%$ | $38.3 \%$ |  |
| $40-64$ | 11,836 | 54.6 | 154.9 | $0.5 \%$ | $18.5 \%$ |  |
| $65-$ | 10,157 | 73.6 | 148.0 | $9.5 \%$ | $1.7 \%$ |  |

Height
FY 2013

| Height (cm) (overall) |  |  |  |  |
| ---: | :--- | ---: | ---: | :--- |
| Age | Number <br> examinees | of | Average age | Average height |
| $0-6$ | 3,801 | 3.7 | 96.5 |  |
| $7-15$ | 6,429 | 10.8 | 141.8 |  |
| $16-39$ | 6,535 | 29.0 | 163.1 |  |
| $40-64$ | 16,922 | 55.3 | 159.8 |  |
| $65-$ | 18,960 | 73.5 | 154.3 |  |


| Height (cm) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | 150 cm and <br> below | 170 cm <br> above |  |
| $0-6$ | 1,950 | 3.7 | 97.0 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 3,291 | 10.9 | 143.0 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 2,480 | 28.3 | 171.1 | $0.4 \%$ | $58.8 \%$ |  |
| $40-64$ | 6,511 | 55.7 | 167.6 | $0.3 \%$ | $34.8 \%$ |  |
| $65-$ | 8,636 | 73.4 | 161.4 | $3.4 \%$ | $7.9 \%$ |  |


| Height (cm) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average <br> height | 140 cm <br> below | 160 cm and <br> above |  |
| $0-6$ | 1.851 | 3.7 | 95.9 | $\ldots$ | $\ldots$ |  |
| $7-15$ | 3,138 | 10.8 | 140.6 | $\ldots$ | $\ldots$ |  |
| $16-39$ | 4,055 | 29.5 | 158.2 | $0.2 \%$ | $37.2 \%$ |  |
| $40-64$ | 10,411 | 55.0 | 155.0 | $0.5 \%$ | $19.3 \%$ |  |
| $65-$ | 10,324 | 73.5 | 148.4 | $8.6 \%$ | $2.1 \%$ |  |

The average height of FY 2011 is 98.5 cm for ages $0-6,144.1 \mathrm{~cm}$ for ages $7-15,163.2 \mathrm{~cm}$ for ages $16-39,160.0 \mathrm{~cm}$ for ages $40-64$, and 153.5 cm for ages 65 and above. Further, the average height for males is 99.2 cm for ages $0-6,145.1 \mathrm{~cm}$ for ages $7-15,170.9 \mathrm{~cm}$ for ages $16-39,167.5$ cm for ages $40-64$, and 160.8 cm for ages 65 and above. The average height for females is 97.7 cm for ages $0-6,143.0 \mathrm{~cm}$ for ages $7-15,158.0 \mathrm{~cm}$ for ages $16-39,154.9 \mathrm{~cm}$ for ages $40-64$, and 147.6 cm for ages 65 and above. There was no year-to-year difference of average age in each age group until FY 2013, but there has been a difference in average height for age groups 0-6 and $7-15$. However, since there are modifying factors such as different times of conducting the medical exam, it is not a strict comparison. There is no change in the average height for each age group 16 and above.
※〈Reference〉Children's medical exam period ( $0-15$ year olds)
FY 2011 : Jan-Mar 2012
FY 2012 : Jul-Dec 2012
FY 2013 : Jul-Dec 2013

## Weight

FY 2011

| Weight (kg) (overall) |  |  |  |  |
| ---: | :--- | ---: | :--- | :--- |
| Age | Number <br> examinees | of | Average age | Average weight |
| $0-6$ | 6,462 | 3.6 | 16.1 |  |
| $7-15$ | 11,481 | 11.0 | 40.2 |  |
| $16-39$ | 14,761 | 28.1 | 60.5 |  |
| $40-64$ | 23,637 | 54.0 | 61.2 |  |
| $65-$ | 16,722 | 73.7 | 56.8 |  |


| Weight (kg) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> weight | 50 kg and below | 70 kg and above |
| 0-6 | 3,271 | 3.6 | 16.4 | ... | $\ldots$ |
| 7-15 | 5,768 | 10.9 | 41.0 | ... | .. |
| 16-39 | 5,963 | 27.7 | 68.8 | 3.8\% | 39.8\% |
| 40-64 | 9,560 | 54.5 | 69.0 | 1.9\% | 42.6\% |
| 65- | 7,499 | 73.4 | 62.7 | 8.1\% | 20.2\% |


| Weight (kg) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average weight | 45 kg and below | 65 kg and above |
| 0-6 | 3,191 | 3.6 | 15.8 | $\ldots$ | $\ldots$ |
| 7-15 | 5,713 | 11.0 | 39.5 | ... | $\ldots$ |
| 16-39 | 8,798 | 28.3 | 54.8 | 13.8\% | 14.1\% |
| 40-64 | 14,077 | 53.7 | 56.0 | 9.1\% | 15.1\% |
| 65- | 9,223 | 73.8 | 52.1 | 19.9\% | 6.9\% |

FY 2012

| Weight (kg) (overall) |  |  |  |  |
| ---: | :--- | ---: | :--- | :--- |
| Age | Number <br> examinees | of | Average age | Average weight |
| $0-6$ | 4,365 | 3.6 | 15.1 |  |
| $7-15$ | 7,437 | 10.9 | 38.3 |  |
| $16-39$ | 8,478 | 28.6 | 60.3 |  |
| $40-64$ | 19,553 | 55.0 | 61.1 |  |
| $65-$ | 18,683 | 73.5 | 56.9 |  |


| Weight (kg) (male) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number <br> examinees | Average age | Average <br> weight | $50 \quad \mathrm{~kg}$ <br> below | and | 70 <br> above | kg |
| and |  |  |  |  |  |  |  |
| $0-6$ | 2,174 | 3.6 | 15.4 | $\ldots$ | $\ldots$ |  |  |
| $7-15$ | 3,810 | 10.8 | 39.0 | $\ldots$ | $\ldots$ |  |  |
| $16-39$ | 3,230 | 27.9 | 69.2 | $4.4 \%$ | $40.9 \%$ |  |  |
| $40-64$ | 7,717 | 55.4 | 68.8 | $2.2 \%$ | $41.3 \%$ |  |  |
| $65-$ | 8,479 | 73.4 | 62.5 | $8.5 \%$ | $20.1 \%$ |  |  |


| Weight (kg) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average weight | 45 kg and below | 65 kg and above |
| 0-6 | 2,191 | 3.6 | 14.8 | ... | $\ldots$ |
| 7-15 | 3,627 | 10.9 | 37.5 | $\ldots$ | .. |
| 16-39 | 5,248 | 29.1 | 54.9 | 14.0\% | 14.3\% |
| 40-64 | 11,836 | 54.6 | 56.1 | 9.4\% | 15.9\% |
| 65- | 10,159 | 73.6 | 52.2 | 20.4\% | 7.3\% |

## Weight

FY 2013

| Weight (kg) (overall) |  |  |  |  |
| ---: | :--- | ---: | ---: | :--- |
| Age | Number <br> examinees | of | Average age | Average weight |
| $0-6$ | 3,802 | 3.7 | 15.2 |  |
| $7-15$ | 6,429 | 10.8 | 37.9 |  |
| $16-39$ | 6,534 | 29.0 | 60.2 |  |
| $40-64$ | 16,921 | 55.3 | 61.0 |  |
| $65-$ | 18,964 | 73.5 | 57.1 |  |


| Weight (kg) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average weight | 50 kg and below | 70 kg and above |
| 0-6 | 1,951 | 3.7 | 15.5 | $\ldots$ | .. |
| 7-15 | 3,291 | 10.9 | 38.9 | . | ... |
| 16-39 | 2,480 | 28.3 | 69.0 | 4.3\% | 40.6\% |
| 40-64 | 6,511 | 55.7 | 69.0 | 2.1\% | 42.5\% |
| 65- | 8,638 | 73.4 | 62.7 | 8.3\% | 21.0\% |


| Weight (kg) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average weight | 45 kg and below | 65 kg and above |
| 0-6 | 1,851 | 3.7 | 14.9 | $\ldots$ | .. |
| 7-15 | 3,138 | 10.8 | 36.8 | ... | .. |
| 16-39 | 4,054 | 29.5 | 54.9 | 14.6\% | 14.5\% |
| 40-64 | 10,410 | 55.0 | 56.1 | 9.6\% | 16.2\% |
| 65- | 10,326 | 73.5 | 52.4 | 19.7\% | 7.6\% |

The average weight of FY 2011 was 16.1 kg for age group $0-6,40.2 \mathrm{~kg}$ for age group $7-15$, 60.5 kg for age group $16-39,61.2 \mathrm{~kg}$ for age group $40-64$, and 56.8 kg for age group 65 and above. Furthermore, the average weight for males is 16.4 kg for age group $0-6,41.0 \mathrm{~kg}$ for age group $7-15,68.8 \mathrm{~kg}$ for age group $16-39,69.0 \mathrm{~kg}$ for age group $40-64$, and 62.7 kg for age group 65 and above. The prevalence of those weighing 70 kg and above was $39.8 \%$ for age group $16-39$, $42.6 \%$ for age group $40-64$, and $20.2 \%$ for age group 65 and above. The average weight of women is 15.8 kg for age group $0-6,39.5 \mathrm{~kg}$ for age group $7-15$, 54.8 kg for age group $16-39$, 56.0 kg for age group $40-64$, and 52.1 kg for age group 65 and above. Those weighing 65 kg and above were $14.1 \%$ for age group $16-39,15.1 \%$ for age group $40-64$, and $6.9 \%$ for age group 65 and above. There was no year-to-year difference of average age in each age group until FY 2013, but there was a difference in average weight among age groups $0-6$ and $7-15$. However, since there are modifying factors such as different medical exam times, it is not a strict comparison. There was a tendency of increase of for each age group 16 and above for males weighing 70 kg and above and females weighing 65 kg and above.
※ 〈Reference〉Children's medical exam period (0-15 year olds)
FY 2011 : Jan-Mar 2012
FY 2012 : Jul-Dec 2012
FY 2013 : Jul-Dec 2013

## BMI

FY 2011

| BMI (weight/height ${ }^{2}$ ) (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | :---: |
| Age | Number <br> examinees | Average age | Average BMI | Less than 18 | 25 and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 14,761 | 28.1 | 22.6 | $8.0 \%$ | $22.3 \%$ |  |
| $40-64$ | 23,637 | 54.0 | 23.8 | $2.8 \%$ | $33.7 \%$ |  |
| $65-$ | 16,717 | 73.7 | 24.0 | $2.5 \%$ | $37.1 \%$ |  |


| BMI (weight/height²) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees | Average age |  | Average BMI | Less than 18 | 25 and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,963 | 27.7 | 23.5 | $4.7 \%$ | $29.8 \%$ |  |
| $40-64$ | 9,560 | 54.5 | 24.6 | $1.1 \%$ | $41.6 \%$ |  |
| $65-$ | 7,498 | 73.4 | 24.2 | $1.8 \%$ | $39.1 \%$ |  |


| BMI (weight/height ${ }^{2}$ ) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees | Average age | Average BMI | Less than 18 | 25 and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,798 | 28.3 | 21.9 | $10.2 \%$ | $17.2 \%$ |  |
| $40-64$ | 14,077 | 53.7 | 23.3 | $4.0 \%$ | $28.4 \%$ |  |
| $65-$ | 9,219 | 73.8 | 23.9 | $3.1 \%$ | $35.4 \%$ |  |

FY 2012

| BMI (weight/height ${ }^{2}$ ) (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Age | Number <br> examinees |  | Average age | Average BMI | Less than 18 | 25 and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,478 | 28.6 | 22.5 | $8.9 \%$ | $22.3 \%$ |  |
| $40-64$ | 19,551 | 55.0 | 23.8 | $2.9 \%$ | $33.6 \%$ |  |
| $65-$ | 18,632 | 73.5 | 23.9 | $2.8 \%$ | $35.2 \%$ |  |


| BMI (weight/height²) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees | Average age | Average BMI | Less than 18 | 25 and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 3,230 | 27.9 | 23.6 | $5.2 \%$ | $30.7 \%$ |  |
| $40-64$ | 7,716 | 55.4 | 24.5 | $1.2 \%$ | $40.3 \%$ |  |
| $65-$ | 8,475 | 73.4 | 24.0 | $2.0 \%$ | $36.4 \%$ |  |


| BMI (weight/height ${ }^{2}$ ) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees |  | Average age | Average BMI | Less than 18 | 25 and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,248 | 29.1 | 21.9 | $11.1 \%$ | $17.1 \%$ |  |
| $40-64$ | 11,835 | 54.6 | 23.4 | $4.1 \%$ | $29.2 \%$ |  |
| $65-$ | 10,157 | 73.6 | 23.8 | $3.4 \%$ | $34.3 \%$ |  |

## BMI

FY 2013

| BMI (weight/height ${ }^{2}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average BMI | Less than 18 | 25 and above |
| 0-6 | - | - | - | - | - |
| 7-15 | - | - | - | - | . |
| 16-39 | 6,534 | 29.0 | 22.5 | 9.1\% | 22.1\% |
| 40-64 | 16,921 | 55.3 | 23.8 | 3.1\% | 33.5\% |
| $65-$ | 18,960 | 73.5 | 23.9 | 2.9\% | 35.3\% |


| BMI (weight/height²) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees | Average age |  | Average BMI | Less than 18 | 25 and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 2,480 | 28.3 | 23.5 | $5.3 \%$ | $30.0 \%$ |  |
| $40-64$ | 6,511 | 55.7 | 24.5 | $1.2 \%$ | $40.9 \%$ |  |
| $65-$ | 8,636 | 73.4 | 24.0 | $2.1 \%$ | $36.3 \%$ |  |


| BMI (weight/height ${ }^{2}$ ) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | ---: | ---: |
| Age | Number <br> examinees | Average age | Average BMI | Less than 18 | 25 and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 4,054 | 29.5 | 21.9 | $11.3 \%$ | $17.3 \%$ |  |
| $40-64$ | 10,410 | 55.0 | 23.3 | $4.2 \%$ | $28.9 \%$ |  |
| $65-$ | 10,324 | 73.5 | 23.8 | $3.5 \%$ | $34.4 \%$ |  |

Overweight individuals with a BMI of $25 \mathrm{~kg} / \mathrm{m}^{2}$ or above for FY 2011 were $22.3 \%$ for age group 16-39 ( $29.8 \%$ for males and $17.2 \%$ for females), $33.7 \%$ for age group $40-64$ ( $41.6 \%$ for males and $28.4 \%$ for females), and $37.1 \%$ for age group 65 and above ( $39.1 \%$ for males and $35.4 \%$ for females). On the other hand, the overweight people of FY 2013 for age groups 16-39, 40-64, and 65 and above were $22.1 \%, 33.5 \%$ and $35.3 \%$, respectively. There had been a slight decrease for those in age group 65 and above, but the prevalence barely changed among overweight individuals of other age groups.

## Abdominal circumference (AC)

FY 2011

| AC (cm) (overall) |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | of | Average age | Average AC |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 2,470 | 29.7 | $\cdot$ |  |  |
| $40-64$ | 23,601 | 54.0 | 78.0 |  |  |
| $65-$ | 10,264 | 69.9 | 83.8 |  |  |
|  |  | 85.3 |  |  |  |


| AC (cm) (male) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> AC | 85 cm and above |
| 0-6 | - | - | . |  |
| 7-15 | - | - | - |  |
| 16-39 | 867 | 29.0 | 82.2 | 37.3\% |
| 40-64 | 9,546 | 54.5 | 86.6 | 56.0\% |
| 65- | 4,649 | 69.8 | 86.5 | 58.2\% |


| AC (cm) (female) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> AC | 90 cm and above |
| 0-6 | . | - | . |  |
| 7-15 | . | - |  |  |
| 16-39 | 1,603 | 30.0 | 75.8 | 9.5\% |
| 40-64 | 14,055 | 53.7 | 81.9 | 19.5\% |
| 65- | 5,615 | 70.1 | 84.4 | 26.7\% |

FY 2012

| AC (cm) (overall) |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | of | Average age | Average AC |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 1,971 | 30.0 | $\cdot$ |  |  |
| $40-64$ | 19,506 | 55.0 | 77.6 |  |  |
| $65-$ | 11,859 | 69.8 | 84.0 |  |  |
|  |  | 85.2 |  |  |  |


| AC (cm) |  |  |  |  |  |  | (male) |
| ---: | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Age | $\begin{array}{l}\text { Number } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { AC }\end{array}$ | 85 cm and above |  |  |  |$]$


| AC (cm) |  |  |  |  |  | (female) |
| ---: | :--- | :--- | :--- | :--- | :---: | :---: |
| Age | $\begin{array}{l}\text { Number } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { AC }\end{array}$ | 90 cm and above |  |  |$]$.

## AC

FY 2013

| AC (cm) (overall) |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | of | Average age | Average AC |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 1,561 | 30.0 | $\cdot$ |  |  |
| $40-64$ | 16,904 | 55.3 | 77.2 |  |  |
| $65-$ | 11,958 | 69.6 | 83.8 |  |  |
|  |  | 85.1 |  |  |  |


| AC (cm) |  |  |  |  |  | (male) |
| ---: | :--- | :--- | :--- | :--- | :---: | :---: |
| Age | $\begin{array}{l}\text { Number } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { AC }\end{array}$ | 85 cm and above |  |  |$]$


| AC (cm) (female) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> AC | 90 cm and above |
| 0-6 | - | - |  |  |
| 7-15 | - | - | - |  |
| 16-39 | 977 | 30.2 | 75.2 | 8.6\% |
| 40-64 | 10,400 | 55.0 | 82.1 | 20.7\% |
| 65- | 6,504 | 69.7 | 84.2 | 26.9\% |

The prevalence of AC above diagnostic criteria of metabolic syndrome ( 85 cm and above for males and 90 cm and above for females) for FY 2011 was: $37.3 \%$ for males and $9.5 \%$ for females for age group $16-39 ; 56.0 \%$ for males and $19.5 \%$ for females for age group $40-64 ; 58.2 \%$ for males and $26.7 \%$ for females for age group 65 and above. For FY 2012 these numbers were: $36.3 \%$ for males and $8.6 \%$ for females for age group $16-39 ; 56.2 \%$ for males and $20.8 \%$ for females for age group $40-64 ; 56.4 \%$ for males and $26.6 \%$ for females for age group 65 and above. For FY 2013 these numbers were: $31.7 \%$ for males and $8.6 \%$ for females for age group $16-39 ; 55.6 \%$ for males and $20.7 \%$ for females for age group $40-64$; and $55.6 \%$ for males and $26.9 \%$ for females for age group 65 and above. There was almost no change for the prevalence except for males in age group 16-39. For males of age
group 16-39, the prevalence of visceral fat accumulation decreased between the two year period of FY 2011 and 2013.

## Systolic blood pressure

FY 2011

| Systolic blood pressure (mmHg) (overall) |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- |
| Age | Number of <br> examinees | Average age | Average <br> systolic blood <br> pressure | 140 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 11,414 | 11.0 | 107.4 | $\cdot$ |
| $16-39$ | 14,757 | 28.1 | 113.7 | $0.6 \%$ |
| $40-64$ | 23,633 | 54.0 | 127.7 | $3.3 \%$ |
| $65-$ | 16,726 | 73.7 | 136.6 | $22.5 \%$ |


| Systolic blood pressure (mmHg) (male) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> systolic blood <br> pressure | 140 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,728 | 10.9 | 108.6 | $\cdot$ |  |
| $16-39$ | 5,963 | 27.7 | 118.8 | $0.9 \%$ |  |
| $40-64$ | 9,559 | 54.5 | 130.8 | $5.8 \%$ |  |
| $65-$ | 7,497 | 73.4 | 137.2 | $27.5 \%$ |  |


| Systolic blood pressure (mmHg) (female) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average systolic blood pressure | 140 mmHg and above |
| 0-6 | - | - | - |  |
| 7-15 | 5,686 | 11.0 | 106.3 | 0.2\% |
| 16-39 | 8,794 | 28.3 | 110.2 | 1.6\% |
| 40-64 | 14,074 | 53.7 | 125.7 | 19.1\% |
| 65- | 9,229 | 73.8 | 136.1 | 40.4\% |

FY 2012

| Systolic blood pressure (mmHg) (overall) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | $\begin{array}{l}\text { Number of } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { systolic blood } \\ \text { pressure }\end{array}$ | 140 mmHg and above |  |$]$.


| Systolic blood pressure (mmHg) (male) |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> systolic blood <br> pressure | 140 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | . | . |  |
| $7-15$ | 3,778 | 10.8 | 106.2 | $0.4 \%$ |  |
| $16-39$ | 3,230 | 27.9 | 117.6 | $4.9 \%$ |  |
| $40-64$ | 7,716 | 55.4 | 128.2 | $21.5 \%$ |  |
| $65-$ | 8,479 | 73.4 | 133.8 | $34.2 \%$ |  |


| Systolic blood pressure (mmHg) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | $\begin{array}{l}\text { Number of } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { systolic blood } \\ \text { pressure }\end{array}$ | 140 mmHg and above |  |$]$.

## Systolic blood pressure

FY 2013

| Systolic blood pressure (mmHg) (overall) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average <br> systolic blood <br> pressure | 140 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 6,404 | 10.8 | 105.2 |  |  |
| $16-39$ | 6,536 | 29.0 | 111.4 | $0.2 \%$ |  |
| $40-64$ | 16,922 | 55.3 | 124.1 | $2.2 \%$ |  |
| $65-$ | 18,969 | 73.5 | 131.2 | $15.3 \%$ |  |


| Systolic blood pressure (mmHg) (male) |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- |
| Age | $\begin{array}{l}\text { Number } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { systolic blood } \\ \text { pressure }\end{array}$ | 140 mmHg and above |$]$


| Systolic blood pressure (mmHg) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average <br> systolic blood <br> pressure | 140 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 3,128 | 10.8 | 104.1 |  |  |
| $16-39$ | 4,056 | 29.5 | 108.1 | $0.1 \%$ |  |
| $40-64$ | 10,409 | 55.0 | 122.1 | $1.0 \%$ |  |
| $65-$ | 10,327 | 73.5 | 130.7 | $12.9 \%$ |  |

Hypertensive individuals with a systolic blood pressure of 140 mmHg or above in FY 2011 were: $3.3 \%$ for age group 16-39 ( $5.8 \%$ for males and $1.6 \%$ for females); $22.5 \%$ for age group $40-64$ ( $27.5 \%$ for males and $19.1 \%$ for females); and $41.6 \%$ for age group 65 and above ( $43.1 \%$ for males and $40.4 \%$ for females). This increased with age and for each age group, males outnumbered females. The prevalence of hypertensive individuals gradually decreased for each age group as the group aged for both FY 2012 and FY 2013.

## Diastolic blood pressure

FY 2011

| Diastolic blood pressure (mmHg) (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 11,411 | 11.0 | 62.4 | $0.6 \%$ |
| $16-39$ | 14,757 | 28.1 | 69.0 | $3.7 \%$ |
| $40-64$ | 23,633 | 54.0 | 78.8 | $17.0 \%$ |
| $65-$ | 16,726 | 73.7 | 78.6 | $15.0 \%$ |


| Diastolic blood pressure (mmHg) (male) |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,727 | 10.9 | 62.6 | $0.8 \%$ |  |
| $16-39$ | 5,963 | 27.7 | 72.3 | $6.6 \%$ |  |
| $40-64$ | 9,559 | 54.5 | 81.8 | $24.1 \%$ |  |
| $65-$ | 7,497 | 73.4 | 79.7 | $17.9 \%$ |  |


| Diastolic blood pressure (mmHg) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,684 | 11.0 | 62.2 | $0.4 \%$ |  |
| $16-39$ | 8,794 | 28.3 | 66.7 | $1.7 \%$ |  |
| $40-64$ | 14,074 | 53.7 | 76.8 | $12.2 \%$ |  |
| $65-$ | 9,229 | 73.8 | 77.7 | $12.6 \%$ |  |

FY 2012

| Diastolic blood pressure (mmHg) (overall) |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 7,379 | 10.9 | 60.9 | $0.3 \%$ |
| $16-39$ | 8,478 | 28.6 | 67.6 | $2.8 \%$ |
| $40-64$ | 19,551 | 55.0 | 76.9 | $13.1 \%$ |
| $65-$ | 18,642 | 73.5 | 76.3 | $10.5 \%$ |


| Diastolic blood pressure (mmHg) (male) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 3,778 | 10.8 | 61.2 | $0.4 \%$ |
| $16-39$ | 3,230 | 27.9 | 70.7 | $4.8 \%$ |
| $40-64$ | 7,716 | 55.4 | 79.9 | $18.5 \%$ |
| $65-$ | 8,479 | 73.4 | 77.4 | $12.5 \%$ |


| Diastolic blood pressure (mmHg) (female) |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,601 | 11.0 | 60.6 | $0.3 \%$ |  |
| $16-39$ | 5,248 | 29.1 | 65.8 | $1.5 \%$ |  |
| $40-64$ | 11,835 | 54.6 | 75.0 | $9.6 \%$ |  |
| $65-$ | 10,163 | 73.6 | 75.4 | $8.7 \%$ |  |

## Diastolic blood pressure

FY 2013

| Diastolic blood pressure (mmHg) (overall) |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 6,403 | 10.9 | 61.3 | $0.5 \%$ |
| $16-39$ | 6,536 | 29.0 | 67.5 | $2.5 \%$ |
| $40-64$ | 16,922 | 55.3 | 76.2 | $11.1 \%$ |
| $65-$ | 18,969 | 73.5 | 75.0 | $8.1 \%$ |


| Diastolic blood pressure (mmHg) (male) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 3,276 | 10.9 | 61.5 | $0.6 \%$ |
| $16-39$ | 2,480 | 28.3 | 70.7 | $4.7 \%$ |
| $40-64$ | 6,513 | 55.7 | 79.1 | $16.4 \%$ |
| $65-$ | 8,642 | 73.4 | 76.0 | $9.6 \%$ |


| Diastolic blood pressure (mmHg) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average diastolic <br> blood pressure | 90 mmHg and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,127 | 10.8 | 61.2 | $0.4 \%$ |  |
| $16-39$ | 4,056 | 29.5 | 65.5 | $1.2 \%$ |  |
| $40-64$ | 10,409 | 55.0 | 74.3 | $7.7 \%$ |  |
| $65-$ | 10,327 | 73.5 | 74.2 | $6.7 \%$ |  |

Hypertensive individuals with a diastolic pressure of 90 mmHg and above for FY 2011 were: $3.7 \%$ for age group 16-39 ( $6.6 \%$ for males and $1.7 \%$ for females); $17.0 \%$ for age group $40-64$ ( $24.1 \%$ for males and $12.2 \%$ for females); $15.0 \%$ for age group 65 and above ( $17.9 \%$ for males and $12.6 \%$ for females). This is most common among age groups 40-64, and males were more common than females for each age group. Moreover the prevalence of hypertensive individuals gradually decreased among both males and females with age for all age groups for FY 2012 and FY 2013.

## Urinary sugar

FY 2011

| Urinary sugar (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 14,642 | 28.1 | $0.7 \%$ |  |
| $40-64$ | 23,578 | 54.1 | $2.7 \%$ |  |
| $65-$ | 16,678 | 73.7 | $3.2 \%$ |  |


| Urinary sugar (male) |  |  |  |  |
| ---: | ---: | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,963 | 27.7 | $1.1 \%$ |  |
| $40-64$ | 9,558 | 54.5 | $4.9 \%$ |  |
| $65-$ | 7,486 | 73.4 | $5.0 \%$ |  |


| Urinary sugar (female) |  |  |  |  |
| ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,679 | 28.4 | $0.5 \%$ |  |
| $40-64$ | 14,020 | 53.7 | $1.3 \%$ |  |
| $65-$ | 9,192 | 73.8 | $1.7 \%$ |  |

FY 2012

| Urinary sugar (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,400 | 28.6 | $0.7 \%$ |  |
| $40-64$ | 19,514 | 55.0 | $2.2 \%$ |  |
| $65-$ | 18,606 | 73.5 | $2.3 \%$ |  |


| Urinary sugar (male) |  |  |  |  |
| ---: | ---: | ---: | :--- | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 3,228 | 27.9 | $1.0 \%$ |  |
| $40-64$ | 7,709 | 55.4 | $4.1 \%$ |  |
| $65-$ | 8,463 | 73.4 | $3.7 \%$ |  |


| Urinary sugar (female) |  |  |  |  |
| ---: | :--- | ---: | :--- | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,172 | 29.1 | $0.5 \%$ |  |
| $40-64$ | 11,805 | 54.7 | $1.0 \%$ |  |
| $65-$ | 10,143 | 73.6 | $1.1 \%$ |  |

FY 2013

| Urinary sugar (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 6,489 | 29.0 | $0.7 \%$ |  |
| $40-64$ | 16,879 | 55.3 | $1.9 \%$ |  |
| $65-$ | 18,863 | 73.4 | $2.0 \%$ |  |


| Urinary sugar (male) |  |  |  |  |
| ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 2,476 | 28.3 | $1.1 \%$ |  |
| $40-64$ | 6,501 | 55.7 | $3.6 \%$ |  |
| $65-$ | 8,595 | 73.4 | $3.3 \%$ |  |


| Urinary sugar (female) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 4,013 | 29.5 | $0.4 \%$ |  |
| $40-64$ | 10,378 | 55.0 | $0.9 \%$ |  |
| $65-$ | 10,268 | 73.5 | $1.0 \%$ |  |

The prevalence of individuals that test positive for urinary sugar in FY 2011 was: $0.7 \%$ for age group 16-39 (1.1\% for males and $0.5 \%$ for females), $2.7 \%$ for age group $40-64$ ( $4.9 \%$ for males and $1.3 \%$ for females), and $3.2 \%$ of age group 65 and above ( $5.0 \%$ for males and $1.7 \%$ for females). The prevalence until FY 2013 did not change for those younger than 40 years old, but there was a decrease among individuals 40 years old and above.

## Urine protein

FY 2011

| Urine protein (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | (1+) <br> above |  |
| and |  |  |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 14,642 | 28.1 | $1.1 \%$ |  |
| $40-64$ | 23,577 | 54.1 | $1.4 \%$ |  |
| $65-$ | 16,678 | 73.7 | $2.4 \%$ |  |


| Urine protein (male) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,963 | 27.7 | $1.1 \%$ |  |
| $40-64$ | 9,557 | 54.5 | $2.2 \%$ |  |
| $65-$ | 7,486 | 73.4 | $3.5 \%$ |  |


| Urine protein (female) |  |  |  |  |
| ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,679 | 28.4 | $1.1 \%$ |  |
| $40-64$ | 14,020 | 53.7 | $0.8 \%$ |  |
| $65-$ | 9,192 | 73.8 | $1.5 \%$ |  |

FY 2012

| Urine protein (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 8,400 | 28.6 | $2.2 \%$ |  |
| $40-64$ | 19,515 | 55.0 | $1.7 \%$ |  |
| $65-$ | 18,606 | 73.5 | $2.7 \%$ |  |


| Urine protein (male) |  |  |  |  |
| ---: | :--- | ---: | :--- | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 3,228 | 27.9 | $2.2 \%$ |  |
| $40-64$ | 7,709 | 55.4 | $2.6 \%$ |  |
| $65-$ | 8,463 | 73.4 | $3.8 \%$ |  |


| Urine protein (female) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,172 | 29.1 | $2.2 \%$ |  |
| $40-64$ | 11,806 | 54.7 | $1.1 \%$ |  |
| $65-$ | 10,143 | 73.6 | $1.8 \%$ |  |

## Urine protein

FY 2013

| Urine protein (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | and |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 6,489 | 29.0 | $2.4 \%$ |  |
| $40-64$ | 16,878 | 55.3 | $1.6 \%$ |  |
| $65-$ | 18,863 | 73.4 | $2.6 \%$ |  |


| Urine protein (male) |  |  |  |  |
| ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 2,476 | 28.3 | $\cdot$ |  |
| $40-64$ | 6,501 | 55.7 | $2.3 \%$ |  |
| $65-$ | 8,595 | 73.4 | $3.8 \%$ |  |


| Urine protein (female) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 4,013 | 29.5 | $2.5 \%$ |  |
| $40-64$ | 10,377 | 55.0 | $1.1 \%$ |  |
| $65-$ | 10,268 | 73.5 | $1.6 \%$ |  |

The prevalence by age for urine protein ( $1+$ ) and above for FY 2011 was: $1.1 \%$ for age group $16-39 ; 1.4 \%$ for age group $40-64 ; 2.4 \%$ for age group 65 and above. For FY 2012 it was: $2.2 \%$ for age group 16-39; 1.7\% for age group 40-64; and 2.7\% for age group 65 years old and above. For FY 2013 it was: $2.4 \%$ for age group $16-39 ; 1.6 \%$ for age group $40-64$; and $2.6 \%$ for age group 65 years old and above.

## Urine occult blood

FY 2011

| Urine occult blood (overall) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | (1+) and above | (1+) and above and during time periods other than menstruation. |
| 0-6 | - | - | - |  |
| 7-15 | - | - | - |  |
| 16-39 | 14,630 | 28.1 | 6.9\% | 3.0\% |
| 40-64 | 23,571 | 54.1 | 7.1\% | 5.6\% |
| 65- | 16,678 | 73.7 | 7.4\% | 7.4\% |


| Urine occult blood (male) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number <br> examinees | Average age | $(1+)$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 5,960 | 27.7 | $1.2 \%$ |  |
| $40-64$ | 9,558 | 54.5 | $3.5 \%$ |  |
| $65-$ | 7,486 | 73.4 | $5.5 \%$ |  |


| Urine occult blood (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :---: | :---: |
| Age | Number of <br> examinees | Average age | (1+) and <br> above | $(1+)$ and above and during <br> time periods other than <br> menstruation. |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 8,670 | 28.4 | $10.7 \%$ | $\cdot$ |  |  |
| $40-64$ | 14,013 | 53.7 | $9.6 \%$ | $4.2 \%$ |  |  |
| $65-$ | 9,192 | 73.8 | $8.9 \%$ | $7.0 \%$ |  |  |

FY 2012

| Urine occult blood (overall) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | (1+) and above | (1+) and above and during time periods other than menstruation. |
| 0-6 | - | - | - |  |
| 7-15 | - | - | - | - |
| 16-39 | 8,400 | 28.6 | 7.2\% | 3.2\% |
| 40-64 | 19,510 | 55.0 | 6.8\% | 5.5\% |
| 65- | 18,592 | 73.5 | 6.9\% | 6.9\% |


| Urine occult blood (male) |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 3,228 | 27.9 | $1.4 \%$ |  |
| $40-64$ | 7,707 | 55.4 | $3.6 \%$ |  |
| $65-$ | 8,459 | 73.4 | $4.9 \%$ |  |


| Urine occult blood (female) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | (1+) and above | (1+) and above and during time periods other than menstruation. |
| 0-6 | - | - | - |  |
| 7-15 | - | - | - |  |
| 16-39 | 5,172 | 29.1 | 10.9\% | 4.2\% |
| 40-64 | 11,803 | 54.7 | 8.9\% | 6.8\% |
| 65- | 10,133 | 73.6 | 8.5\% | 8.5\% |

## Urine occult blood

FY 2013

| Urine occult blood (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age of | Number <br> examinees | Average age | $(1+)$ <br> above | and | $(1+)$ and above and during <br> time periods other than <br> menstruation. |  |
| $0-6$ | $\cdot$ | $\cdot$ | . | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 6,488 | 29.0 | $7.0 \%$ | $3.2 \%$ |  |  |
| $40-64$ | 16,878 | 55.3 | $6.8 \%$ | $5.8 \%$ |  |  |
| $65-$ | 18,863 | 73.4 | $6.4 \%$ | $6.4 \%$ |  |  |


| Urine occult blood (male) |  |  |  |  |
| ---: | :--- | ---: | :--- | ---: |
| Age | Number of <br> examinees | Average age | $(1+)$ <br> above | and |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $16-39$ | 2,476 | 28.3 | $1.4 \%$ |  |
| $40-64$ | 6,501 | 55.7 | $3.0 \%$ |  |
| $65-$ | 8,595 | 73.4 | $4.5 \%$ |  |


| Urine occult blood (female) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | (1+) and above | (1+) and above and during time periods other than menstruation. |
| 0-6 | - | - | - |  |
| 7-15 | - | - | - |  |
| 16-39 | 4,012 | 29.5 | 10.4\% | 4.3\% |
| 40-64 | 10,377 | 55.0 | 9.1\% | 7.5\% |
| 65- | 10,268 | 73.5 | 8.0\% | 7.9\% |

The prevalence for each age group in FY 2011 of urine occult blood (1+) and above omitting the time period during menstruation was: $3.0 \%$ for age groups $16-39 ; 5.6 \%$ for age groups $40-64$; and $7.4 \%$ for age groups 65 and above. For FY 2012 the prevalence was: 3.2\% for age group 16-39; 5.5\% for age group 40-64; and 6.9\% for age group 65 and above. For FY 2013 the prevalence was: $3.2 \%$ for age group 16-39; 5.8\% for age group 40-64; and 6.4\% for age group 65 and above.

Serum creatinine
FY 2011

| Serum creatinine (mg/dL) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average serum <br> creatinine |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 11,100 | 11.0 | 0.47 |
| $16-39$ | 14,755 | 28.1 | 0.70 |
| $40-64$ | 23,651 | 54.0 | 0.73 |
| $65-$ | 16,724 | 73.7 | 0.78 |


| Serum creatinine (mg/dL) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average serum <br> creatinine | $1.15 \mathrm{mg} / \mathrm{dL}$ and <br> above | $l .35 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,588 | 10.9 | 0.49 | $0.0 \%$ | $0.0 \%$ |  |
| $16-39$ | 5,965 | 27.7 | 0.83 | $0.4 \%$ | $0.1 \%$ |  |
| $40-64$ | 9,562 | 54.5 | 0.86 | $2.4 \%$ | $0.8 \%$ |  |
| $65-$ | 7,496 | 73.4 | 0.91 | $7.6 \%$ | $2.5 \%$ |  |


| Serum creatinine (mg/dL) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average serum <br> creatinine | $0.95 \mathrm{mg} / \mathrm{dL}$ and <br> above | $1.15 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,512 | 11.0 | 0.45 | - | - |  |
| $16-39$ | 8,790 | 28.3 | 0.62 | $0.2 \%$ | $0.0 \%$ |  |
| $40-64$ | 14,089 | 53.7 | 0.64 | $0.8 \%$ | $0.3 \%$ |  |
| $65-$ | 9,228 | 73.8 | 0.69 | $4.4 \%$ | $1.3 \%$ |  |

FY 2012

| Serum creatinine (mg/dL) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number <br> examinees | Average age | Average serum <br> creatinine |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 7,212 | 10.9 | 0.48 |
| $16-39$ | 8,478 | 28.6 | 0.70 |
| $40-64$ | 19,549 | 55.0 | 0.73 |
| $65-$ | 18,635 | 73.5 | 0.79 |


| Serum creatinine (mg/dL) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average serum <br> creatinine | $1.15 \mathrm{mg} / \mathrm{dL}$ and <br> above | $1.35 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 3,694 | 10.9 | 0.49 | - | - |  |
| $16-39$ | 3,230 | 27.9 | 0.83 | $0.4 \%$ | $0.1 \%$ |  |
| $40-64$ | 7,717 | 55.4 | 0.86 | $2.7 \%$ | $0.9 \%$ |  |
| $65-$ | 8,475 | 73.4 | 0.91 | $8.3 \%$ | $2.9 \%$ |  |


| Serum creatinine (mg/dL) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average serum <br> creatinine | $0.95 \mathrm{mg} / \mathrm{dL}$ and <br> above | $1.15 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,518 | 11.0 | 0.46 | - | - |  |
| $16-39$ | 5,248 | 29.1 | 0.61 | $0.1 \%$ | - |  |
| $40-64$ | 11,832 | 54.6 | 0.65 | $0.8 \%$ | $0.3 \%$ |  |
| $65-$ | 10,160 | 73.6 | 0.69 | $4.5 \%$ | $1.6 \%$ |  |

## Serum creatinine

FY 2013

| Serum creatinine (mg/dL) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average serum <br> creatinine |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 6,095 | 10.9 | 0.47 |
| $16-39$ | 6,535 | 29.0 | 0.70 |
| $40-64$ | 16,921 | 55.3 | 0.73 |
| $65-$ | 18,954 | 73.5 | 0.80 |


| Serum creatinine (mg/dL) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | $\begin{array}{l}\text { Number of } \\ \text { examinees }\end{array}$ |  |  |  |  |  |
| Average |  |  |  |  |  |  |
| age |  |  |  |  |  |  | \(\left.\begin{array}{l}Average <br>

serum <br>
creatinine\end{array} \quad $$
\begin{array}{l}1.15 \mathrm{mg} / \mathrm{dL} \text { and } \\
\text { above }\end{array}
$$ $$
\begin{array}{l}1.35 \mathrm{mg} / \mathrm{dL} \text { and } \\
\text { above }\end{array}
$$\right]\)

| Serum creatinine (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | ---: | ---: | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average serum <br> creatinine | $0.95 \mathrm{mg} / \mathrm{dL}$ and <br> above | $1.15 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 2,978 | 10.9 | 0.45 | - | - |
| $16-39$ | 4,056 | 29.5 | 0.62 | $0.1 \%$ | $0.0 \%$ |
| $40-64$ | 10,411 | 55.0 | 0.65 | $0.9 \%$ | $0.3 \%$ |
| $65-$ | 10,319 | 73.5 | 0.70 | $5.1 \%$ | $1.5 \%$ |

The average values of serum creatinine among males in FY 2011 were: $0.83 \mathrm{mg} / \mathrm{dL}$ for age group $16-39 ; 0.86 \mathrm{mg} / \mathrm{dL}$ for age group $40-64$; and $0.91 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above. The values for FY 2012 were: $0.83 \mathrm{mg} / \mathrm{dL}$ for age group $16-39 ; 0.86 \mathrm{mg} / \mathrm{dL}$ for age group 40-64; $0.91 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above. The values for FY 2013 were $0.83 \mathrm{mg} / \mathrm{dL}$ for age group $16-39 ; 0.86 \mathrm{mg} / \mathrm{dL}$ for age group $40-64 ; 0.91 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above.

The average values of serum creatinine among females in FY 2011 were: $0.62 \mathrm{mg} / \mathrm{dL}$ for age group 16-39; $0.64 \mathrm{mg} / \mathrm{dL}$ for age group 40-64; and $0.69 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above. The values for FY 2012 were: $0.61 \mathrm{mg} / \mathrm{dL}$ for age group $16-39 ; 0.65 \mathrm{mg} / \mathrm{dL}$ for age group 40-64; and $0.69 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above. The values for FY 2013 were: $0.62 \mathrm{mg} / \mathrm{dL}$ for age group $16-39 ; 0.65 \mathrm{mg} / \mathrm{dL}$ for age group $40-64$; and $0.70 \mathrm{mg} / \mathrm{dL}$ for age group 65 and above.

The age-specific prevalence of males with $1.35 \mathrm{mg} / \mathrm{dL}$ and above serum creatinine in FY 2011 was: $0.1 \%$ for age group $16-39 ; 0.8 \%$ for age group $40-64$; and $2.5 \%$ for age group 65 and above. For FY 2012 the prevalence was: $0.1 \%$ for age group $16-39 ; 0.9 \%$ for age group $40-64$; and $2.9 \%$ for age group 65 and above. For FY 2013 the prevalence was: $0.2 \%$ for age group $16-39 ; 0.6 \%$ for age group $40-64$; and $3.2 \%$ for age group 65 and above.
The age-specific prevalence of females with $1.15 \mathrm{mg} / \mathrm{dL}$ and above serum creatinine in FY 2011 was: $0.0 \%$ for age group $16-39 ; 0.3 \%$ for age group $40-64$; and $1.3 \%$ for age group 65 and above. For FY 2012 the prevalence was: not applicable for age groups 16-39; $0.3 \%$ for age group 40-64; and $1.6 \%$ for age group 65 and above. For FY 2013 the prevalence was: $0.0 \%$ for age group 16-39; $0.3 \%$ for age group $40-64$; and $1.5 \%$ for age group 65 and above.

## eGFR

FY 2011

| $\mathrm{eGFR}\left(\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}\right.$ ) (overall) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eGFR | Less than <br> $\mathrm{ml} / \mathrm{min} / 1.73$. <br> $\mathrm{~m}^{2}$ | Less than <br> $\mathrm{ml} / \mathrm{min} . / 1.73$ |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 14,753 | 28.1 | 96.2 | $0.1 \%$ | $0.2 \%$ |  |  |
| $40-64$ | 23,651 | 54.0 | 76.9 | $1.2 \%$ | $6.6 \%$ |  |  |
| $65-$ | 16,724 | 73.7 | 66.6 | $9.0 \%$ | $28.6 \%$ |  |  |


| $\mathrm{eGFR}\left(\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}\right)(\mathrm{male})$ |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eGFR | Less than 50 <br> $\mathrm{ml} / \mathrm{min} / 1.73$. <br> $\mathrm{~m}^{2}$ | Less than <br> $\mathrm{ml} / \mathrm{min} . / 1.73$ |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $16-39$ | 5,964 | 27.7 | 95.1 | $0.1 \%$ | $0.3 \%$ |  |  |
| $40-64$ | 9,562 | 54.5 | 76.2 | $1.5 \%$ | $7.7 \%$ |  |  |
| $65-$ | 7,496 | 73.4 | 67.1 | $8.7 \%$ | $27.1 \%$ |  |  |


| eGFR (mL/min/1.73 m${ }^{2}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | Less than 50 $\mathrm{ml} / \mathrm{min}$. $/ 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - | - |
| 7-15 | - | . | . | - |  |
| 16-39 | 8,789 | 28.3 | 97.0 | 0.1\% | 0.2\% |
| 40-64 | 14,089 | 53.7 | 77.3 | 0.9\% | 6.0\% |
| $65-$ | 9,228 | 73.8 | 66.2 | 9.2\% | 29.7\% |

FY 2012

| eGFR (mL/min/1.73 m²) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | $\begin{aligned} & \text { Less than } 50 \\ & \mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2} \end{aligned}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - |  |
| 7-15 | - | - | - | - |  |
| 16-39 | 8,478 | 28.6 | 96.3 | 0.1\% | 0.3\% |
| 40-64 | 19,549 | 55.0 | 75.9 | 1.4\% | 8.5\% |
| 65- | 18,635 | 73.5 | 66.2 | 9.6\% | 30.7\% |


| eGFR (mL/min/1.73 m²) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | Less than 50 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - | - |
| 7-15 | - | - | - | - | - |
| 16-39 | 3,230 | 27.9 | 95.4 | 0.1\% | 0.3\% |
| 40-64 | 7,717 | 55.4 | 76.1 | 1.7\% | 8.6\% |
| 65- | 8,475 | 73.4 | 66.9 | 9.3\% | 28.5\% |


| eGFR ( $\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average eGFR | Less than 50 $\mathrm{ml} / \mathrm{min}$. $/ 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - | - |
| 7-15 | - | - | - | - | - |
| 16-39 | 5,248 | 29.1 | 96.8 | 0.0\% | 0.2\% |
| 40-64 | 11,832 | 54.6 | 75.8 | 1.1\% | 8.5\% |
| 65- | 10,160 | 73.6 | 65.6 | 9.9\% | 32.4\% |

FY 2013

| eGFR (mL/min/1.73 m²) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | Less than 50 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - |  |
| 7-15 | - | - | - | - |  |
| 16-39 | 6,535 | 29.0 | 95.5 | 0.1\% | 0.3\% |
| 40-64 | 16,919 | 55.3 | 75.4 | 1.3\% | 9.0\% |
| 65- | 18,954 | 73.5 | 65.5 | 10.5\% | 32.5\% |


| eGFR (mL/min/1.73 m²) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | Less than 50 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min}$. $/ 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - | - |
| 7-15 | - | - | - | - |  |
| 16-39 | 2,479 | 28.3 | 95.1 | 0.2\% | 0.4\% |
| 40-64 | 6,508 | 55.7 | 75.6 | 1.4\% | 8.8\% |
| 65- | 8,635 | 73.4 | 66.3 | 10.2\% | 30.1\% |


| eGFR (mL/min $1.73 \mathrm{~m}^{2}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> eGFR | Less than 50 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ | Less than 60 $\mathrm{ml} / \mathrm{min} . / 1.73 \mathrm{~m}^{2}$ |
| 0-6 | - | - | - | - | - |
| 7-15 | - | - | - | - | - |
| 16-39 | 4,056 | 29.5 | 95.8 | 0.1\% | 0.2\% |
| 40-64 | 10,411 | 55.0 | 75.3 | 1.2\% | 9.1\% |
| 65- | 10,319 | 73.5 | 64.8 | 10.8\% | 34.5\% |

The average eGFR for FY 2011 were: $96.2 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 16-39; 76.9 $\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group $40-64$; and $66.6 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 65 and above. The average eGFR for FY 2012 were: $96.3 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 16-39; 75.9 $\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$, for age group 40-64; and $66.2 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 65 and above. The average eGFR for FY 2013 were: $95.5 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 16-39; 75.4 $\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 40-64; and $65.5 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ for age group 65 and above.

The prevalence for each age group that had less than $60 \mathrm{~mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ eGFR in FY 2011 was: $0.2 \%$ for age group 16-39; $6.6 \%$ for age group 40-64; and $28.6 \%$ for age group 65 and above. The prevalence for FY 2012 was: $0.3 \%$ for age group 16-39; 8.5\% for age group 40-64; and $30.7 \%$ for age group 65 and above. The prevalence for FY 2013 was: $0.3 \%$ for age group 16-39; $9.0 \%$ for age group 40-64; and 32.5\% for age group 65 and above.

## Fasting plasma glucose

FY 2011

| Fasting plasma glucose |  |  |  |  |  |  |  | (mg/dL) (overall) <br> Age <br> Number of <br> examinees |  | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |  |  |  |  |  |  |
| $7-15$ | 11,063 | 11.0 | 88.6 | $2.4 \%$ | $0.3 \%$ | $0.1 \%$ |  |  |  |  |  |  |  |  |
| $16-39$ | 12,929 | 28.0 | 89.0 | $1.9 \%$ | $0.8 \%$ | $0.5 \%$ |  |  |  |  |  |  |  |  |
| $40-64$ | 21,027 | 54.1 | 99.9 | $15.1 \%$ | $5.7 \%$ | $2.5 \%$ |  |  |  |  |  |  |  |  |
| $65-$ | 14,744 | 73.6 | 105.5 | $26.1 \%$ | $9.4 \%$ | $3.1 \%$ |  |  |  |  |  |  |  |  |


| Fasting plasma glucose (mg/dL) (male) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,569 | 10.9 | 89.4 | $2.4 \%$ | $0.3 \%$ | $0.1 \%$ |  |
| $16-39$ | 5,204 | 27.6 | 91.1 | $2.9 \%$ | $1.2 \%$ | $0.7 \%$ |  |
| $40-64$ | 8,370 | 54.5 | 104.6 | $22.5 \%$ | $9.0 \%$ | $3.8 \%$ |  |
| $65-$ | 6,575 | 73.4 | 108.2 | $31.7 \%$ | $11.9 \%$ | $3.8 \%$ |  |


| Fasting plasma glucose(mg/dL) (female) <br> AgeNumber of <br> examinees |  |  |  |  |  |  |  | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |  |  |  |  |
| $7-15$ | 5,494 | 11.0 | 87.7 | $2.3 \%$ | $0.3 \%$ | $0.1 \%$ |  |  |  |  |  |  |
| $16-39$ | 7,725 | 28.3 | 87.6 | $1.2 \%$ | $0.5 \%$ | $0.3 \%$ |  |  |  |  |  |  |
| $40-64$ | 12,657 | 53.8 | 96.8 | $10.3 \%$ | $3.5 \%$ | $1.7 \%$ |  |  |  |  |  |  |
| $65-$ | 8,169 | 73.7 | 103.3 | $21.6 \%$ | $7.4 \%$ | $2.5 \%$ |  |  |  |  |  |  |

FY 2012

| Fasting plasma glucose |  |  |  |  |  |  |  | (mg/dL) (overall) |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,687 | 11.0 | 86.3 | $0.7 \%$ | $0.1 \%$ | $0.0 \%$ |  |  |
| $16-39$ | 7,289 | 28.6 | 88.0 | $1.9 \%$ | $0.8 \%$ | $0.5 \%$ |  |  |
| $40-64$ | 17,040 | 55.0 | 98.5 | $14.2 \%$ | $5.3 \%$ | $2.0 \%$ |  |  |
| $65-$ | 15,855 | 73.4 | 102.7 | $21.8 \%$ | $7.5 \%$ | $2.1 \%$ |  |  |


| Fasting plasma glucose |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age |  | Number of <br> examinees | Average <br> age | Average <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |  |
| $7-15$ | 2,908 | 11.0 | 87.1 | $0.7 \%$ | $0.0 \%$ | $0.0 \%$ |  |
| $16-39$ | 2,744 | 27.8 | 90.0 | $2.7 \%$ | $1.1 \%$ | $0.7 \%$ |  |
| $40-64$ | 6,639 | 55.4 | 103.2 | $21.5 \%$ | $8.7 \%$ | $3.3 \%$ |  |
| $65-$ | 7,189 | 73.3 | 105.2 | $26.7 \%$ | $9.7 \%$ | $2.8 \%$ |  |


| Fasting plasma glucose (mg/dL)(female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 2,779 | 11.1 | 85.4 | $0.6 \%$ | $0.1 \%$ | - |  |
| $16-39$ | 4,545 | 29.2 | 86.8 | $1.4 \%$ | $0.6 \%$ | $0.5 \%$ |  |
| $40-64$ | 10,401 | 54.7 | 95.5 | $9.5 \%$ | $3.1 \%$ | $1.2 \%$ |  |
| $65-$ | 8,666 | 73.4 | 100.6 | $17.8 \%$ | $5.6 \%$ | $1.5 \%$ |  |

## Fasting plasma glucose

FY 2013

| Fasting plasma glucose (mg/dL) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 4,483 | 11.0 | 86.7 | $0.5 \%$ | $0.0 \%$ | $0.0 \%$ |  |
| $16-39$ | 5,470 | 29.0 | 88.5 | $1.9 \%$ | $0.7 \%$ | $0.5 \%$ |  |
| $40-64$ | 14,749 | 55.3 | 98.7 | $14.6 \%$ | $5.2 \%$ | $1.7 \%$ |  |
| $65-$ | 16,158 | 73.2 | 102.7 | $22.4 \%$ | $7.4 \%$ | $1.8 \%$ |  |


| Fasting plasma glucose |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age |  | Number of <br> examinees | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |  |
| $7-15$ | 2,296 | 11.0 | 87.6 | $0.6 \%$ | $0.0 \%$ | $0.0 \%$ |  |
| $16-39$ | 2,032 | 28.1 | 90.8 | $3.0 \%$ | $1.4 \%$ | $0.9 \%$ |  |
| $40-64$ | 5,562 | 55.7 | 103.1 | $22.1 \%$ | $8.5 \%$ | $2.8 \%$ |  |
| $65-$ | 7,363 | 73.1 | 105.5 | $28.0 \%$ | $9.6 \%$ | $2.5 \%$ |  |


| Fasting plasma glucose (mg/dL) (female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average fasting <br> plasma glucose | $110 \mathrm{mg} / \mathrm{dL}$ <br> and above | $130 \mathrm{mg} / \mathrm{dL}$ <br> and above | $160 \mathrm{mg} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 2,187 | 11.0 | 85.9 | $0.5 \%$ | $0.0 \%$ | - |  |
| $16-39$ | 3,438 | 29.5 | 87.2 | $1.3 \%$ | $0.3 \%$ | $0.2 \%$ |  |
| $40-64$ | 9,187 | 55.0 | 95.9 | $10.1 \%$ | $3.2 \%$ | $1.1 \%$ |  |
| $65-$ | 8,795 | 73.2 | 100.4 | $17.7 \%$ | $5.5 \%$ | $1.3 \%$ |  |

The prevalence of individuals with impaired glucose tolerance with fasting plasma glucose of $110 \mathrm{mg} / \mathrm{dL}$ and above in FY 2011 was: $1.9 \%$ ( $2.9 \%$ for males and $1.2 \%$ for females) for age group 16-39; $15.1 \%$ ( $22.5 \%$ for males and $10.3 \%$ for females) for age group $40-64$; and $26.1 \%$ ( $31.7 \%$ for males and $21.6 \%$ for females) for age group 65 and above. The prevalence of individuals until FY 2013 has not changed among those younger than 65, but there has been a decrease among those 65 and above.

The prevalence of individuals with poor blood sugar control at $130 \mathrm{mg} / \mathrm{dL}$ and $160 \mathrm{mg} / \mathrm{dL}$
for fasting plasma glucose in FY 2011 was respectively: $0.8 \%$ ( $1.2 \%$ for males and $0.5 \%$ for females) and $0.5 \%$ ( $0.7 \%$ for males and $0.3 \%$ for females) for age group $16-39 ; 5.7 \%(9.0 \%$ for males and $3.5 \%$ for females) and $2.5 \%$ ( $3.8 \%$ for males and $1.7 \%$ for females) for age group 40-64; and $9.4 \%$ ( $11.9 \%$ for males and $7.4 \%$ for females) and $3.1 \% ~(3.8 \%$ for males and $2.5 \%$ for females) for age group 65 and above. The prevalence of individuals until FY 2013 did not change among those younger than 40 , but there was a decrease among those 40 and above.

## HbA1c (NGSP)

FY 2011

| HbA1c (\%) (NGSP) (overall) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | 6.0\% and above | 7.0\% and above | 8.0\% and above |
| 0-6 | - |  | - | - |  |  |
| 7-15 | 11,084 | 11.0 | 5.3 | 1.0\% | 0.1\% | 0.0\% |
| 16-39 | 14,755 | 28.1 | 5.1 | 1.6\% | 0.7\% | 0.4\% |
| 40-64 | 23,650 | 54.0 | 5.5 | 11.8\% | 3.8\% | 1.8\% |
| 65- | 16,723 | 73.7 | 5.6 | 18.7\% | 4.7\% | 1.8\% |


| HbAlc (\%) (NGSP) (male) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> HbA1c | 6.0\% and above | 7.0\% and above | 8.0\% and above |
| 0-6 | . | - | - |  | - |  |
| 7-15 | 5,578 | 10.9 | 5.3 | 1.2\% | 0.1\% | 0.1\% |
| 16-39 | 5,966 | 27.7 | 5.1 | 2.1\% | 1.0\% | 0.7\% |
| 40-64 | 9,562 | 54.5 | 5.5 | 16.1\% | 5.7\% | 2.6\% |
| 65- | 7,496 | 73.4 | 5.7 | 22.4\% | 5.9\% | 2.2\% |


| HbA1c (\%) (NGSP) (female) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | 6.0\% and above | 7.0\% and above | 8.0\% and above |
| 0-6 | - | - | . |  |  |  |
| 7-15 | 5,506 | 11.0 | 5.3 | 0.9\% | 0.1\% | 0.0\% |
| 16-39 | 8,789 | 28.3 | 5.1 | 1.2\% | 0.5\% | 0.3\% |
| 40-64 | 14,088 | 53.7 | 5.4 | 8.9\% | 2.6\% | 1.2\% |
| 65- | 9,227 | 73.8 | 5.6 | 15.8\% | 3.7\% | 1.4\% |

FY 2012

| HbA1c (\%) (NGSP) (overall) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | 6.0\% and above | $7.0 \%$ and above | $8.0 \%$ and above |
| 0-6 | - | - | - |  | - |  |
| 7-15 | 7,283 | 10.9 | 5.3 | 0.6\% | 0.1\% | 0.0\% |
| 16-39 | 8,478 | 28.6 | 5.2 | 2.0\% | 0.7\% | 0.5\% |
| 40-64 | 19,552 | 55.0 | 5.5 | 13.2\% | 3.5\% | 1.5\% |
| 65- | 18,638 | 73.5 | 5.7 | 20.3\% | 3.9\% | 1.3\% |


| HbAlc (\%) (NGSP) (male) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> HbA1c | 6.0\% and above | 7.0\% and above | 8.0\% and above |
| 0-6 | . | - | - | . | - |  |
| 7-15 | 3,711 | 10.9 | 5.3 | 0.8\% | 0.1\% | 0.1\% |
| 16-39 | 3,229 | 27.9 | 5.2 | 2.6\% | 0.7\% | 0.5\% |
| 40-64 | 7,717 | 55.4 | 5.6 | 17.2\% | 5.1\% | 2.3\% |
| 65- | 8,476 | 73.4 | 5.7 | 22.9\% | 5.1\% | 1.6\% |


| HbA1c (\%) (NGSP) (female) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | $6.0 \%$ and above | 7.0\% and above | 8.0\% and above |
| 0-6 | - | - | - | - | - | - |
| 7-15 | 3,527 | 11.0 | 5.3 | 0.5\% | 0.1\% | - |
| 16-39 | 5,249 | 29.1 | 5.2 | 1.6\% | 0.6\% | 0.5\% |
| 40-64 | 11,835 | 54.6 | 5.5 | 10.6\% | 2.4\% | 1.0\% |
| 65- | 10,162 | 73.6 | 5.6 | 18.2\% | 3.0\% | 1.1\% |

FY 2013

| HbA1c (\%) (NGSP) (overall) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | $6.0 \%$ and above | 7.0\% and above | 8.0\% and above |
| 0-6 | - | - |  | - |  |  |
| 7-15 | 6,290 | 10.9 | 5.3 | 0.5\% | 0.0\% | 0.0\% |
| 16-39 | 6,536 | 29.0 | 5.2 | 2.2\% | 0.6\% | 0.4\% |
| 40-64 | 16,919 | 55.3 | 5.6 | 15.4\% | 3.7\% | 1.5\% |
| 65- | 18,956 | 73.5 | 5.8 | 24.0\% | 4.5\% | 1.2\% |


| HbA1c (\%) (NGSP) (male) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> HbA1c | $6.0 \%$ and above | 7.0\% and above | 8.0\% and above |
| 0-6 | - | - | - | - | - | - |
| 7-15 | 3,218 | 10.9 | 5.3 | 0.4\% | 0.1\% | 0.0\% |
| 16-39 | 2,480 | 28.3 | 5.2 | 2.8\% | 0.8\% | 0.7\% |
| 40-64 | 6,508 | 55.7 | 5.7 | 18.9\% | 5.4\% | 2.2\% |
| 65- | 8,637 | 73.4 | 5.8 | 26.7\% | 5.6\% | 1.4\% |


| HbA1c (\%) (NGSP) (female) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> HbA1c | 6.0\% and above | $7.0 \%$ and above | 8.0\% and above |
| 0-6 | - | - | - | - | - |  |
| 7-15 | 3,072 | 10.9 | 5.3 | 0.6\% | - | - |
| 16-39 | 4,056 | 29.5 | 5.2 | 1.8\% | 0.4\% | 0.3\% |
| 40-64 | 10,411 | 55.0 | 5.6 | 13.2\% | 2.7\% | 1.1\% |
| 65- | 10,319 | 73.5 | 5.7 | 21.8\% | 3.5\% | 1.0\% |

The prevalence of individuals with impaired glucose tolerance of HbA1c $6.0 \%$ and above in FY 2011 was: $1.6 \%$ ( $2.1 \%$ for males and $1.2 \%$ for females) for age group $16-39 ; 11.8 \%(16.1 \%$ for males and $8.9 \%$ for females) for age group $40-64$; and $18.7 \%$ ( $22.4 \%$ for males and $15.8 \%$ for females) for age group 65 and above. The prevalence increased until FY 2013, but the prevalence of HbA1c $7.0 \%$ and above and $8.0 \%$ and above for FY 2011 was: $0.7 \%$ ( $1.0 \%$ for males and $0.5 \%$ for females) and $0.4 \%$ ( $0.7 \%$ for males and $0.3 \%$ for females) for age group $16-39 ; 3.8 \%$ ( $5.7 \%$ for males and $2.6 \%$ for females) and $1.8 \%$ ( $2.6 \%$ for males and $1.2 \%$ for
females) for age group 40-64; 4.7\% (5.9\% for males and 3.7\% for females) and $1.8 \%$ ( $2.2 \%$ for males and $1.4 \%$ for females) for age group 65 and above. The prevalence decreased until FY 2013 and the decrease of prevalence of individuals with poor blood sugar control of HbA 1 c $8.0 \%$ and above was prominent.

## HDL-C

FY 2011

| HDL-C (mg/dL) (overall) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> HDL-C | Less than $40 \mathrm{mg} / \mathrm{dL}$ |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 11,101 | 11.0 | 62.5 | $2.9 \%$ |  |
| $16-39$ | 14,757 | 28.1 | 62.1 | $4.0 \%$ |  |
| $40-64$ | 23,651 | 54.0 | 61.4 | $5.8 \%$ |  |
| $65-$ | 16,725 | 73.7 | 57.6 | $8.5 \%$ |  |


| HDL-C (mg/dL) (male) |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- |
| Age of | $\begin{array}{l}\text { Number } \\ \text { examinees }\end{array}$ | Average age | $\begin{array}{l}\text { Average } \\ \text { HDL-C }\end{array}$ | Less than $40 \mathrm{mg} / \mathrm{dL}$ |  |$]$.


| HDL-C (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | ---: | ---: | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average <br> HDL-C | Less than $40 \mathrm{mg} / \mathrm{dL}$ |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,515 | 11.0 | 62.7 | $2.8 \%$ |  |
| $16-39$ | 8,791 | 28.3 | 66.1 | $1.7 \%$ |  |
| $40-64$ | 14,089 | 53.7 | 65.3 | $2.5 \%$ |  |
| $65-$ | 9,229 | 73.8 | 60.4 | $4.6 \%$ |  |

FY 2012

| HDL-C (mg/dL) (overall) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> HDL-C | Less than 40 mg/dL |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 7,243 | 10.9 | 61.3 | $2.7 \%$ |  |
| $16-39$ | 8,479 | 28.6 | 62.0 | $4.3 \%$ |  |
| $40-64$ | 19,551 | 55.0 | 60.7 | $6.4 \%$ |  |
| $65-$ | 18,638 | 73.5 | 57.2 | $8.7 \%$ |  |


| HDL-C (mg/dL) (male) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age |  | Average <br> HDL-C |  |
| $0-6$ | $\cdot$ | $\cdot$ | Less than 40 mg/dL |  |  |
| $7-15$ | 3,711 | 10.9 | 61.4 | $\cdot$ |  |
| $16-39$ | 3,230 | 27.9 | 55.9 | $3.1 \%$ |  |
| $40-64$ | 7,716 | 55.4 | 55.6 | $8.1 \%$ |  |
| $65-$ | 8,476 | 73.4 | 54.0 | $11.6 \%$ |  |


| HDL-C (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> HDL-C | Less than $40 \mathrm{mg} / \mathrm{dL}$ |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,532 | 11.0 | 61.1 | $2.3 \%$ |  |
| $16-39$ | 5,249 | 29.1 | 65.7 | $1.9 \%$ |  |
| $40-64$ | 11,835 | 54.6 | 64.1 | $3.0 \%$ |  |
| $65-$ | 10,162 | 73.6 | 59.8 | $5.1 \%$ |  |

## HDL-C

FY 2013

| HDL-C (mg/dL) (overall) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age |  | Average <br> HDL-C |  |
| $0-6$ | $\cdot$ | $\cdot$ | Less than 40 mg/dL |  |  |
| $7-15$ | 6,291 | 10.9 | 61.5 | $\cdot$ |  |
| $16-39$ | 6,536 | 29.0 | 62.2 | $2.9 \%$ |  |
| $40-64$ | 16,921 | 55.3 | 61.7 | $4.1 \%$ |  |
| $65-$ | 18,957 | 73.5 | 58.0 | $5.5 \%$ |  |


| HDL-C (mg/dL) (male) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age |  | Average <br> HDL-C |  |
| $0-6$ | $\cdot$ | $\cdot$ | Less than $40 \mathrm{mg} / \mathrm{dL}$ |  |  |
| $7-15$ | 3,219 | 10.9 | 61.7 | $\cdot$ |  |
| $16-39$ | 2,480 | 28.3 | 56.0 | $3.1 \%$ |  |
| $40-64$ | 6,510 | 55.7 | 56.1 | $8.1 \%$ |  |
| $65-$ | 8,637 | 73.4 | 54.7 | $10.5 \%$ |  |


| HDL-C (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :---: |
| Age | Number <br> examinees | Average age | Average <br> HDL-C | Less than 40 mg/dL |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,072 | 10.9 | 61.3 | $2.7 \%$ |  |
| $16-39$ | 4,056 | 29.5 | 65.9 | $1.7 \%$ |  |
| $40-64$ | 10,411 | 55.0 | 65.2 | $2.4 \%$ |  |
| $65-$ | 10,320 | 73.5 | 60.8 | $4.2 \%$ |  |

The prevalence of individuals suffering from hypertriglyceridemia with less than HDL-C 40 $\mathrm{mg} / \mathrm{dL}$ in FY 2011 was: 2.9\% (3.1\% for males and 2.8\% for females) for age group 7-15; 4.0\% (7.5\% for males and 1.7\% for females) for age group 16-39; 5.8\% (10.6\% for males and 2.5\% for females) for age group $40-64$; and $8.5 \%$ ( $13.3 \%$ for males and $4.6 \%$ for females) for age group 65 and above. The prevalence of the age group 65 and above barely changed until FY 2013.

## Triglyceride (TG)

FY 2011

| Triglyceride (TG) (mg/dL) (overall) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 11,091 | 11.0 | 76.5 | $7.0 \%$ | $0.6 \%$ |  |
| $16-39$ | 14,757 | 28.1 | 88.5 | $11.4 \%$ | $1.7 \%$ |  |
| $40-64$ | 23,651 | 54.0 | 117.8 | $21.3 \%$ | $3.2 \%$ |  |
| $65-$ | 16,725 | 73.7 | 114.7 | $20.3 \%$ | $1.6 \%$ |  |


| Triglyceride (TG) (mg/dL) (male) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,584 | 10.9 | 75.5 | $7.7 \%$ | $0.6 \%$ |  |
| $16-39$ | 5,966 | 27.7 | 109.3 | $19.0 \%$ | $3.2 \%$ |  |
| $40-64$ | 9,562 | 54.5 | 142.3 | $31.5 \%$ | $6.0 \%$ |  |
| $65-$ | 7,496 | 73.4 | 119.6 | $23.1 \%$ | $2.5 \%$ |  |


| Triglyceride (TG) (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,507 | 11.0 | 77.5 | $6.3 \%$ | $0.5 \%$ |
| $16-39$ | 8,791 | 28.3 | 74.3 | $6.2 \%$ | $0.6 \%$ |
| $40-64$ | 14,089 | 53.7 | 101.1 | $14.4 \%$ | $1.3 \%$ |
| $65-$ | 9,229 | 73.8 | 110.7 | $18.1 \%$ | $1.0 \%$ |

FY 2012

| Triglyceride (TG) (mg/dL) (overall) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 7,242 | 10.9 | 77.0 | $7.1 \%$ | $0.7 \%$ |
| $16-39$ | 8,480 | 28.6 | 89.5 | $11.7 \%$ | $1.6 \%$ |
| $40-64$ | 19,552 | 55.0 | 117.0 | $21.5 \%$ | $3.2 \%$ |
| $65-$ | 18,638 | 73.5 | 110.8 | $17.9 \%$ | $1.6 \%$ |


| Triglyceride (TG) (mg/dL) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and above | $300 \mathrm{mg} / \mathrm{dL}$ and above |
| 0-6 | - | - | - | - | - |
| 7-15 | 3,711 | 10.9 | 75.9 | 7.7\% | 0.6\% |
| 16-39 | 3,230 | 27.9 | 111.7 | 19.9\% | 3.0\% |
| 40-64 | 7,717 | 55.4 | 140.0 | 32.0\% | 5.9\% |
| 65- | 8,476 | 73.4 | 115.3 | 20.5\% | 2.2\% |


| Triglyceride (TG) (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 3,531 | 11.0 | 78.1 | $6.5 \%$ | $0.7 \%$ |
| $16-39$ | 5,250 | 29.1 | 75.8 | $6.7 \%$ | $0.7 \%$ |
| $40-64$ | 11,835 | 54.6 | 102.0 | $14.6 \%$ | $1.4 \%$ |
| $65-$ | 10,162 | 73.6 | 107.1 | $15.7 \%$ | $1.0 \%$ |

## Triglyceride (TG)

FY 2013

| Triglyceride (TG) (mg/dL) (overall) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 6,290 | 10.9 | 78.7 | $7.3 \%$ | $0.7 \%$ |
| $16-39$ | 6,536 | 29.0 | 90.9 | $11.8 \%$ | $2.0 \%$ |
| $40-64$ | 16,919 | 55.3 | 117.4 | $21.5 \%$ | $3.3 \%$ |
| $65-$ | 18,957 | 73.5 | 112.6 | $18.4 \%$ | $1.6 \%$ |


| Triglyceride (TG) (mg/dL) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and above | $300 \mathrm{mg} / \mathrm{dL}$ and above |
| 0-6 | - | - | - | - | - |
| 7-15 | 3,219 | 10.9 | 77.6 | 7.6\% | 0.6\% |
| 16-39 | 2,480 | 28.3 | 115.8 | 20.5\% | 4.2\% |
| 40-64 | 6,509 | 55.7 | 140.8 | 30.9\% | 6.2\% |
| 65- | 8,637 | 73.4 | 116.5 | 20.5\% | 2.2\% |


| Triglyceride (TG) (mg/dL) (female) |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> triglyceride | $150 \mathrm{mg} / \mathrm{dL}$ and <br> above | $300 \mathrm{mg} / \mathrm{dL}$ and <br> above |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |
| $7-15$ | 3,071 | 10.9 | 79.7 | $7.0 \%$ | $0.7 \%$ |
| $16-39$ | 4,056 | 29.5 | 75.7 | $6.4 \%$ | $0.6 \%$ |
| $40-64$ | 10,410 | 55.0 | 102.8 | $15.6 \%$ | $1.5 \%$ |
| $65-$ | 10,320 | 73.5 | 109.4 | $16.6 \%$ | $1.2 \%$ |

The prevalence of individuals with hypertriglyceridemia of $150 \mathrm{mg} / \mathrm{dL}$ and above in FY 2011 was: $7.0 \%$ ( $7.7 \%$ for males and $6.3 \%$ for females) for age group $7-15 ; 11.4 \%$ ( $19.0 \%$ for males and $6.2 \%$ for females) for age group $16-39 ; 21.3 \%$ ( $31.5 \%$ for males and $14.4 \%$ for females) for age group $40-64$; and $20.3 \%$ ( $23.1 \%$ for males and $18.1 \%$ for females) for age group 65 and above. There was a slight decrease in the age group 65 and above for FY 2012, that was followed by a period of no change until FY 2013.

## LDL-C

FY 2011

| LDL-C (mg/dL) (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 11,098 | 11.0 | 94.1 | $13.2 \%$ | $3.5 \%$ |  |
| $16-39$ | 14,757 | 28.1 | 110.1 | $33.9 \%$ | $15.9 \%$ |  |
| $40-64$ | 23,651 | 54.0 | 129.3 | $59.8 \%$ | $35.8 \%$ |  |
| $65-$ | 16,725 | 73.7 | 122.9 | $52.8 \%$ | $28.6 \%$ |  |


| LDL-C (mg/dL) (male) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,587 | 10.9 | 91.9 | $11.7 \%$ | $3.3 \%$ |  |
| $16-39$ | 5,966 | 27.7 | 114.6 | $40.2 \%$ | $21.0 \%$ |  |
| $40-64$ | 9,562 | 54.5 | 126.9 | $57.8 \%$ | $34.2 \%$ |  |
| $65-$ | 7,496 | 73.4 | 118.6 | $48.0 \%$ | $24.6 \%$ |  |


| LDL-C (mg/dL) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 5,511 | 11.0 | 96.3 | $14.8 \%$ | $3.6 \%$ |  |
| $16-39$ | 8,791 | 28.3 | 107.0 | $29.6 \%$ | $12.4 \%$ |  |
| $40-64$ | 14,089 | 53.7 | 130.9 | $61.1 \%$ | $37.0 \%$ |  |
| $65-$ | 9,229 | 73.8 | 126.4 | $56.7 \%$ | $31.7 \%$ |  |

FY 2012

| LDL-C (mg/dL) (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 7,240 | 10.9 | 93.7 | $12.2 \%$ | $3.4 \%$ |  |
| $16-39$ | 8,479 | 28.6 | 109.3 | $32.7 \%$ | $15.7 \%$ |  |
| $40-64$ | 19,550 | 55.0 | 126.0 | $56.0 \%$ | $31.6 \%$ |  |
| $65-$ | 18,638 | 73.5 | 118.0 | $46.7 \%$ | $22.3 \%$ |  |


| LDL-C (mg/dL) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,710 | 10.9 | 91.9 | $10.7 \%$ | $3.2 \%$ |  |
| $16-39$ | 3,230 | 27.9 | 114.2 | $39.0 \%$ | $21.2 \%$ |  |
| $40-64$ | 7,716 | 55.4 | 123.7 | $53.6 \%$ | $29.6 \%$ |  |
| $65-$ | 8,476 | 73.4 | 113.8 | $41.8 \%$ | $18.4 \%$ |  |


| LDL-C (mg/dL) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,530 | 11.0 | 95.6 | $13.9 \%$ | $3.6 \%$ |  |
| $16-39$ | 5,249 | 29.1 | 106.3 | $28.9 \%$ | $12.3 \%$ |  |
| $40-64$ | 11,834 | 54.6 | 127.6 | $57.6 \%$ | $32.9 \%$ |  |
| $65-$ | 10,162 | 73.6 | 121.6 | $50.8 \%$ | $25.6 \%$ |  |

## LDL-C

FY 2013

| LDL-C (mg/dL) (overall) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 6,291 | 10.9 | 94.1 | $13.8 \%$ | $3.9 \%$ |  |
| $16-39$ | 6,536 | 29.0 | 110.4 | $34.5 \%$ | $15.6 \%$ |  |
| $40-64$ | 16,921 | 55.3 | 126.8 | $57.2 \%$ | $32.6 \%$ |  |
| $65-$ | 18,957 | 73.5 | 119.1 | $47.9 \%$ | $23.2 \%$ |  |


| LDL-C (mg/dL) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,219 | 10.9 | 92.6 | $12.3 \%$ | $4.2 \%$ |  |
| $16-39$ | 2,480 | 28.3 | 114.1 | $40.0 \%$ | $19.5 \%$ |  |
| $40-64$ | 6,510 | 55.7 | 123.9 | $54.3 \%$ | $30.0 \%$ |  |
| $65-$ | 8,637 | 73.4 | 114.6 | $42.8 \%$ | $18.8 \%$ |  |


| LDL-C (mg/dL) (female) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> LDL-C | $120 \mathrm{mg} / \mathrm{dL}$ and <br> above | $140 \mathrm{mg} / \mathrm{dL}$ and <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |
| $7-15$ | 3,072 | 10.9 | 95.8 | $15.4 \%$ | $3.5 \%$ |  |
| $16-39$ | 4,056 | 29.5 | 108.2 | $31.2 \%$ | $13.2 \%$ |  |
| $40-64$ | 10,411 | 55.0 | 128.6 | $59.1 \%$ | $34.1 \%$ |  |
| $65-$ | 10,320 | 73.5 | 122.9 | $52.3 \%$ | $26.9 \%$ |  |

The prevalence of individuals with hyper-LDL-cholesterolemia of $120 \mathrm{mg} / \mathrm{dL}$ and above for FY 2011 was: $13.2 \%$ ( $11.7 \%$ for males and $14.8 \%$ for females) for age group $7-15 ; 33.9 \% ~(40.2 \%$ for males and $29.6 \%$ for females) for age group $16-39 ; 59.8 \%$ ( $57.8 \%$ for males and $61.1 \%$ for females) for age group $40-64$; and $52.8 \%$ ( $48.0 \%$ for males and $56.7 \%$ for females) for age group 65 and above. There was a slight decrease of individuals 65 and above in FY 2012, followed by a period of no change until FY 2013.

## AST

FY 2011

| AST (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average AST | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | - |  | - | - | . |
| 7-15 | 11,103 | 11.0 | 23.6 | 9.6\% | 0.8\% |
| 16-39 | 14,757 | 28.1 | 20.6 | 8.2\% | 2.0\% |
| 40-64 | 23,651 | 54.0 | 24.2 | 14.5\% | 2.8\% |
| 65- | 16,725 | 73.7 | 25.7 | 17.7\% | 2.8\% |


| AST (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> AST | 31 U/L and above | 51 U/L and above |
| 0-6 | - | - | - | - | . |
| 7-15 | 5,588 | 10.9 | 25.1 | 12.8\% | 1.3\% |
| 16-39 | 5,966 | 27.7 | 24.2 | 15.3\% | 3.8\% |
| 40-64 | 9,562 | 54.5 | 26.9 | 21.4\% | 4.3\% |
| 65- | 7,496 | 73.4 | 27.2 | 23.0\% | 3.7\% |


| AST (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average AST | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | - | - | $\cdot$ | - |  |
| 7-15 | 5,515 | 11.0 | 22.0 | 6.4\% | 0.4\% |
| 16-39 | 8,791 | 28.3 | 18.2 | 3.4\% | 0.8\% |
| 40-64 | 14,089 | 53.7 | 22.3 | 9.7\% | 1.8\% |
| 65- | 9,229 | 73.8 | 24.5 | 13.4\% | 2.2\% |

FY 2012

| AST (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average AST | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | - | $\cdot$ | - | - | $\cdot$ |
| 7-15 | 7,243 | 10.9 | 24.1 | 10.6\% | 0.8\% |
| 16-39 | 8,479 | 28.6 | 20.8 | 8.7\% | 1.8\% |
| 40-64 | 19,552 | 55.0 | 24.7 | 15.8\% | 3.0\% |
| 65- | 18,638 | 73.5 | 26.4 | 19.5\% | 2.8\% |


| AST (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average AST | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | . | $\cdot$ | - |  | . |
| 7-15 | 3,711 | 10.9 | 25.6 | 14.1\% | 1.2\% |
| 16-39 | 3,229 | 27.9 | 24.6 | 16.6\% | 3.3\% |
| 40-64 | 7,717 | 55.4 | 27.6 | 23.7\% | 4.4\% |
| 65- | 8,476 | 73.4 | 27.8 | 25.1\% | 3.6\% |


| AST (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> AST | 31 U/L and above | 51 U/L and above |
| 0-6 | - | - | - |  |  |
| 7-15 | 3,532 | 11.0 | 22.6 | 7.0\% | 0.5\% |
| 16-39 | 5,250 | 29.1 | 18.5 | 3.8\% | 0.9\% |
| 40-64 | 11,835 | 54.6 | 22.8 | 10.6\% | 2.1\% |
| 65- | 10,162 | 73.6 | 25.2 | 14.8\% | 2.2\% |

## AST

FY 2013

| AST (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average AST | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | - |  | - | - | . |
| 7-15 | 6,291 | 10.9 | 24.0 | 10.5\% | 0.7\% |
| 16-39 | 6,536 | 29.0 | 20.6 | 8.4\% | 2.0\% |
| 40-64 | 16,919 | 55.3 | 24.1 | 14.1\% | 2.8\% |
| 65- | 18,957 | 73.5 | 25.6 | 16.8\% | 2.6\% |


| AST (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> AST | 31 U/L and above | 51 U/L and above |
| 0-6 | - | - | - |  |  |
| 7-15 | 3,219 | 10.9 | 25.5 | 14.4\% | 1.1\% |
| 16-39 | 2,480 | 28.3 | 24.1 | 15.7\% | 3.6\% |
| 40-64 | 6,509 | 55.7 | 26.8 | 20.9\% | 4.3\% |
| 65- | 8,637 | 73.4 | 26.8 | 21.4\% | 3.2\% |


| AST (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> AST | 31 U/L and above | 51 U/L and above |
| 0-6 | - | - | - | - |  |
| 7-15 | 3,072 | 10.9 | 22.4 | 6.4\% | 0.3\% |
| 16-39 | 4,056 | 29.5 | 18.4 | 3.9\% | 1.0\% |
| 40-64 | 10,410 | 55.0 | 22.4 | 9.8\% | 1.9\% |
| 65- | 10,320 | 73.5 | 24.6 | 13.0\% | 2.0\% |

Results above the reference inferral for AST (i.e., $\geq 51 \mathrm{U} / \mathrm{L}$ ) in FY 2013 were found in: $2.0 \%$ of those aged $16-39,2.8 \%$ aged $40-64$, and $2.6 \%$ aged 65 and above. Further the frequency base on gender for each age group were: $3.6 \%$ for males and $1.0 \%$ for females for age group $16-39 ; 4.3 \%$ for males and $1.9 \%$ for females for age group 40-64; and $3.2 \%$ for males and $2.0 \%$ for females for age group 65 and above. Males had a higher frequency compared to females. The transition of frequency based on age groups for FY 2011, 2012 and 2013 were respectively: $(2.0 \% \rightarrow 1.8 \% \rightarrow 2.0 \%)$ for age group $16-39$; $(2.8 \% \rightarrow 3.0 \% \rightarrow 2.8 \%)$ for age group $40-64$; and $(2.8 \% \rightarrow 2.8 \% \rightarrow 2.6 \%)$ for age group 65 and above.

## ALT

FY 2011

| ALT (U/L) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | 11,103 | 11.0 | 15.7 | $4.5 \%$ | $1.6 \%$ |  |  |
| $16-39$ | 14,757 | 28.1 | 21.8 | $15.9 \%$ | $7.0 \%$ |  |  |
| $40-64$ | 23,651 | 54.0 | 24.5 | $20.8 \%$ | $6.9 \%$ |  |  |
| $65-$ | 16,725 | 73.7 | 20.9 | $13.6 \%$ | $3.7 \%$ |  |  |


| ALT (U/L) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,588 | 10.9 | 17.8 | $7.0 \%$ | $2.6 \%$ |  |  |
| $16-39$ | 5,966 | 27.7 | 31.4 | $31.0 \%$ | $14.1 \%$ |  |  |
| $40-64$ | 9,562 | 54.5 | 30.3 | $32.8 \%$ | $11.3 \%$ |  |  |
| $65-$ | 7,496 | 73.4 | 23.5 | $18.8 \%$ | $5.2 \%$ |  |  |


| ALT (U/L) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | 5,515 | 11.0 | 13.6 | $2.0 \%$ | $0.7 \%$ |  |  |
| $16-39$ | 8,791 | 28.3 | 15.3 | $5.6 \%$ | $2.2 \%$ |  |  |
| $40-64$ | 14,089 | 53.7 | 20.5 | $12.7 \%$ | $3.9 \%$ |  |  |
| $65-$ | 9,229 | 73.8 | 18.8 | $9.5 \%$ | $2.6 \%$ |  |  |

FY 2012

| ALT (U/L) (overall) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | $31 \quad$ U/L and <br> above | 51 U/L and above |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 7,243 | 10.9 | 15.7 | $4.8 \%$ | $1.4 \%$ |  |  |
| $16-39$ | 8,480 | 28.6 | 21.8 | $16.9 \%$ | $7.0 \%$ |  |  |
| $40-64$ | 19,552 | 55.0 | 24.7 | $21.4 \%$ | $7.1 \%$ |  |  |
| $65-$ | 18,638 | 73.5 | 21.6 | $14.2 \%$ | $3.6 \%$ |  |  |


| ALT (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> ALT | 31 U/L and above | $51 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | . | $\cdot$ | - |  |  |
| 7-15 | 3,711 | 10.9 | 17.8 | 7.4\% | 2.2\% |
| 16-39 | 3,230 | 27.9 | 31.8 | 33.6\% | 14.7\% |
| 40-64 | 7,717 | 55.4 | 30.7 | 33.8\% | 11.6\% |
| 65- | 8,476 | 73.4 | 24.0 | 19.5\% | 4.9\% |


| ALT (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> ALT | 31 U/L and above | 51 U/L and above |
| 0-6 | - | - |  |  |  |
| 7-15 | 3,532 | 11.0 | 13.5 | 2.0\% | 0.5\% |
| 16-39 | 5,250 | 29.1 | 15.7 | 6.5\% | 2.3\% |
| 40-64 | 11,835 | 54.6 | 20.8 | 13.3\% | 4.2\% |
| 65- | 10,162 | 73.6 | 19.5 | 9.8\% | 2.6\% |

## ALT

FY 2013

| ALT (U/L) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 6,291 | 10.9 | 15.7 | $4.7 \%$ | $1.6 \%$ |  |  |
| $16-39$ | 6,536 | 29.0 | 21.8 | $16.1 \%$ | $6.8 \%$ |  |  |
| $40-64$ | 16,919 | 55.3 | 24.1 | $20.0 \%$ | $6.7 \%$ |  |  |
| $65-$ | 18,957 | 73.5 | 21.0 | $13.0 \%$ | $3.1 \%$ |  |  |


| ALT (U/L) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 3,219 | 10.9 | 18.0 | $7.5 \%$ | $2.6 \%$ |  |  |
| $16-39$ | 2,480 | 28.3 | 31.3 | $31.6 \%$ | $14.0 \%$ |  |  |
| $40-64$ | 6,509 | 55.7 | 29.7 | $31.6 \%$ | $11.2 \%$ |  |  |
| $65-$ | 8,637 | 73.4 | 23.0 | $17.1 \%$ | $4.2 \%$ |  |  |


| ALT (U/L) (female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> ALT | 31 <br> above | U/L and | $51 \mathrm{U} / \mathrm{L}$ and above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | 3,072 | 10.9 | 13.3 | $1.8 \%$ | $0.5 \%$ |  |  |
| $16-39$ | 4,056 | 29.5 | 15.9 | $6.7 \%$ | $2.5 \%$ |  |  |
| $40-64$ | 10,410 | 55.0 | 20.6 | $12.7 \%$ | $3.9 \%$ |  |  |
| $65-$ | 10,320 | 73.5 | 19.3 | $9.5 \%$ | $2.3 \%$ |  |  |

The prevalence of individuals with an ALT of $51 \mathrm{U} / \mathrm{L}$ and above in FY 2013 was: 6.8\% for age group 16-39; $6.7 \%$ for age group $40-64$; and $3.1 \%$ for age group 65 and above. Furthermore, the frequency based on gender is $14.0 \%$ for males and $2.5 \%$ for females for age group $16-39 ; 11.2 \%$ for males and $3.9 \%$ for females for age group 40-64; and $4.2 \%$ for males and $2.3 \%$ for females for age group 65 and above. Males had higher frequencies compared to women, and the age group 65 and above had lower frequencies. The transition based on age group for FY 2011, 2012 and 2013 were respectively: $(7.0 \% \rightarrow 7.0 \% \rightarrow 6.8 \%)$ for age group $16-39 ;(6.9 \% \rightarrow 7.1 \% \rightarrow 6.7 \%)$ for age group $40-64$; and $(3.7 \% \rightarrow 3.6 \% \rightarrow 3.1 \%)$ for age group 65 and above.

## $\gamma$-GT

FY 2011

| $\gamma$-GT (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | 51 U/L and above | 101 U/L and above |
| 0-6 | . | - | . |  |  |
| 7-15 | 11,101 | 11.0 | 14.6 | 0.6\% | 0.1\% |
| 16-39 | 14,757 | 28.1 | 25.4 | 8.5\% | 2.5\% |
| 40-64 | 23,651 | 54.0 | 39.7 | 19.9\% | 6.2\% |
| 65- | 16,725 | 73.7 | 32.8 | 13.4\% | 3.7\% |


| $\gamma$-GT (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | 51 U/L and above | 101 U/L and above |
| 0-6 |  | - | - |  |  |
| 7-15 | 5,587 | 10.9 | 16.0 | 1.0\% | 0.1\% |
| 16-39 | 5,966 | 27.7 | 37.2 | 17.2\% | 5.4\% |
| 40-64 | 9,562 | 54.5 | 58.8 | 35.6\% | 12.3\% |
| 65- | 7,496 | 73.4 | 44.2 | 22.4\% | 6.9\% |


| $\gamma$-GT (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average $\gamma \text {-GT }$ | 51 U/L and above | 101 U/L and above |
| 0-6 | $\cdot$ | - | - | - |  |
| 7-15 | 5,514 | 11.0 | 13.2 | 0.2\% | 0.0\% |
| 16-39 | 8,791 | 28.3 | 17.3 | 2.5\% | 0.5\% |
| 40-64 | 14,089 | 53.7 | 26.8 | 9.3\% | 2.1\% |
| 65- | 9,229 | 73.8 | 23.6 | 6.0\% | 1.1\% |

FY 2012

| $\gamma$-GT (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | 51 U/L and above | 101 U/L and above |
| 0-6 | . | - | - | . |  |
| 7-15 | 7,242 | 10.9 | 14.7 | 0.4\% | 0.1\% |
| 16-39 | 8,480 | 28.6 | 25.6 | 8.8\% | 2.5\% |
| 40-64 | 19,552 | 55.0 | 40.5 | 20.4\% | 6.5\% |
| 65- | 18,638 | 73.5 | 33.4 | 14.0\% | 3.8\% |


| $\gamma$-GT (U/L) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | 51 U/L and above | 101 U/L and above |
| 0-6 |  |  |  |  |  |
| 7-15 | 3,710 | 10.9 | 16.0 | 0.7\% | 0.2\% |
| 16-39 | 3,230 | 27.9 | 38.0 | 18.5\% | 5.4\% |
| 40-64 | 7,717 | 55.4 | 60.7 | 36.9\% | 12.8\% |
| 65- | 8,476 | 73.4 | 44.1 | 23.1\% | 6.7\% |


| $\gamma-\mathrm{GT}$ (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> $\gamma$-GT | 51 U/L and above | 101 U/L and above |
| 0-6 | - | - | - | - |  |
| 7-15 | 3,532 | 11.0 | 13.3 | 0.1\% | - |
| 16-39 | 5,250 | 29.1 | 17.9 | 2.8\% | 0.6\% |
| 40-64 | 11,835 | 54.6 | 27.3 | 9.7\% | 2.4\% |
| $65-$ | 10,162 | 73.6 | 24.4 | 6.5\% | 1.5\% |

## $\gamma$-GT

FY 2013

| $\gamma$-GT (U/L) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | $51 \mathrm{U} / \mathrm{L}$ and above | 101 U/L and above |
| 0-6 | - | - | - | - | - |
| 7-15 | 6,291 | 10.9 | 14.4 | 0.4\% | 0.0\% |
| 16-39 | 6,535 | 29.0 | 26.0 | 9.1\% | 2.7\% |
| 40-64 | 16,919 | 55.3 | 39.3 | 19.5\% | 6.2\% |
| 65- | 18,956 | 73.5 | 33.7 | 13.9\% | 3.9\% |


| $\gamma-\mathrm{GT}(\mathrm{U} / \mathrm{L})(\mathrm{male})$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | 51 U/L and above | $101 \mathrm{U} / \mathrm{L}$ and above |
| 0-6 | - | - | - | - |  |
| 7-15 | 3,219 | 10.9 | 15.7 | 0.8\% | 0.1\% |
| 16-39 | 2,480 | 28.3 | 38.8 | 18.8\% | 5.9\% |
| 40-64 | 6,509 | 55.7 | 58.9 | 35.1\% | 12.3\% |
| 65- | 8,637 | 73.4 | 44.4 | 22.6\% | 6.8\% |


| $\gamma$-GT (U/L) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average $\gamma \text {-GT }$ | $51 \mathrm{U} / \mathrm{L}$ and above | 101 U/L and above |
| 0-6 | - | - | - | - | - |
| 7-15 | 3,072 | 10.9 | 13.0 | 0.1\% | 0.0\% |
| 16-39 | 4,055 | 29.5 | 18.2 | 3.1\% | 0.7\% |
| 40-64 | 10,410 | 55.0 | 27.1 | 9.7\% | 2.4\% |
| 65- | 10,319 | 73.5 | 24.7 | 6.6\% | 1.4\% |

Individuals with $101 \mathrm{U} / \mathrm{L}$ and above $\gamma$-GT in FY 2013 were: $2.7 \%$ for age group 16-39; 6.2\% for age group 40-64; and $3.9 \%$ for age group 65 and above. Furthermore the frequencies based on gender were: $5.9 \%$ for males and $0.7 \%$ for females for age group $16-39 ; 12.3 \%$ for males and $2.4 \%$ for females for age group $40-64$; and $6.8 \%$ for males and $1.4 \%$ for females for age group 65 and above. The frequencies for males were higher compared to females. The transition based on age group for FY 2011, 2012 and 2013 were respectively: ( $2.5 \% \rightarrow 2.5 \% \rightarrow 2.7 \%$ ) for age group 16-39; ( $6.2 \% \rightarrow 6.5 \% \rightarrow 6.2 \%$ ) for age group $40-64$; and $(3.7 \% \rightarrow 3.8 \% \rightarrow 3.9 \%)$ for age group 65 and above.

## Uric acid

FY 2011

| Uric acid (mg/dL) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ and above | $8.0 \mathrm{mg} / \mathrm{dL}$ and above |
| 0-6 | - |  | - | - |  |
| 7-15 | 11,091 | 11.0 | 4.5 | 2.5\% | 0.6\% |
| 16-39 | 14,757 | 28.1 | 5.0 | 7.9\% | 2.7\% |
| 40-64 | 23,651 | 54.0 | 5.0 | 8.0\% | 2.7\% |
| 65- | 16,725 | 73.7 | 5.1 | 7.6\% | 2.5\% |


| Uric acid (mg/dL) (male) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ <br> above | $8.0 \mathrm{mg} / \mathrm{dL}$ <br> above | and |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,584 | 10.9 | 4.8 | $4.7 \%$ | $1.2 \%$ |  |  |
| $16-39$ | 5,966 | 27.7 | 6.0 | $18.5 \%$ | $6.5 \%$ |  |  |
| $40-64$ | 9,562 | 54.5 | 5.9 | $18.1 \%$ | $6.2 \%$ |  |  |
| $65-$ | 7,496 | 73.4 | 5.7 | $14.4 \%$ | $4.9 \%$ |  |  |


| Uric acid (mg/dL) (female) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ <br> above | $8.0 \mathrm{mg} / \mathrm{dL}$ <br> above | and |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 5,507 | 11.0 | 4.3 | $0.3 \%$ | $0.1 \%$ |  |  |
| $16-39$ | 8,791 | 28.3 | 4.2 | $0.7 \%$ | $0.2 \%$ |  |  |
| $40-64$ | 14,089 | 53.7 | 4.3 | $1.1 \%$ | $0.3 \%$ |  |  |
| $65-$ | 9,229 | 73.8 | 4.5 | $2.1 \%$ | $0.6 \%$ |  |  |

FY 2012

| Uric acid (mg/dL) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ and above | $8.0 \mathrm{mg} / \mathrm{dL}$ and above |
| 0-6 | . | $\cdot$ | - | . |  |
| 7-15 | 7,232 | 10.9 | 4.7 | 3.4\% | 1.1\% |
| 16-39 | 8,480 | 28.6 | 5.0 | 8.2\% | 2.7\% |
| 40-64 | 19,552 | 55.0 | 5.1 | 9.1\% | 3.1\% |
| 65- | 18,637 | 73.5 | 5.1 | 8.7\% | 3.2\% |


| Uric acid (mg/dL) (male) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ <br> above | $8.0 \mathrm{mg} / \mathrm{dL}$ <br> above | and |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 3,704 | 10.9 | 5.0 | $6.1 \%$ | $2.0 \%$ |  |  |
| $16-39$ | 3,230 | 27.9 | 6.1 | $20.3 \%$ | $6.8 \%$ |  |  |
| $40-64$ | 7,717 | 55.4 | 6.0 | $20.9 \%$ | $7.3 \%$ |  |  |
| $65-$ | 8,475 | 73.4 | 5.8 | $16.0 \%$ | $5.9 \%$ |  |  |


| Uric acid (mg/dL) (female) |  |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \mathrm{mg} / \mathrm{dL}$ <br> above | and | $8.0 \mathrm{mg} / \mathrm{dL}$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | 3,528 | 11.0 | 4.4 | $0.6 \%$ | $0.2 \%$ |  |  |
| $16-39$ | 5,250 | 29.1 | 4.3 | $0.7 \%$ | $0.2 \%$ |  |  |
| $40-64$ | 11,835 | 54.6 | 4.4 | $1.5 \%$ | $0.4 \%$ |  |  |
| $65-$ | 10,162 | 73.6 | 4.6 | $2.6 \%$ | $0.8 \%$ |  |  |

## Uric acid

FY 2013

| Uric acid (mg/dL) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \quad \mathrm{mg} / \mathrm{dL}$ <br> above | and | $8.0 \quad \mathrm{mg} / \mathrm{dL}$ <br> above |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |
| $7-15$ | 6,290 | 10.9 | 4.5 | $2.6 \%$ | $0.7 \%$ |  |  |
| $16-39$ | 6,536 | 29.0 | 5.0 | $8.9 \%$ | $3.2 \%$ |  |  |
| $40-64$ | 16,921 | 55.3 | 5.1 | $8.4 \%$ | $2.7 \%$ |  |  |
| $65-$ | 18,957 | 73.5 | 5.2 | $9.0 \%$ | $2.9 \%$ |  |  |


| Uric acid (mg/dL) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \quad \mathrm{mg} / \mathrm{dL}$ <br> above | 8.0 <br> and <br> above |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | $\cdot$ |  |  |  |
| $7-15$ | 3,218 | 10.9 | 4.8 | $4.9 \%$ |  |  |  |
| $16-39$ | 2,480 | 28.3 | 6.1 | $21.8 \%$ | $1.5 \%$ |  |  |
| $40-64$ | 6,510 | 55.7 | 6.0 | $19.7 \%$ | $8.0 \%$ |  |  |
| $65-$ | 8,637 | 73.4 | 5.8 | $16.3 \%$ | $6.4 \%$ |  |  |


| Uric acid (mg/dL) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> uric acid | $7.1 \quad \mathrm{mg} / \mathrm{dL}$ <br> above | 8.0 <br> and <br> above |  |  |
| $0-6$ | $\cdot$ | $\cdot$ | $\cdot$ | . |  |  |  |
| $7-15$ | 3,072 | 10.9 | 4.2 | $0.2 \%$ |  |  |  |
| $16-39$ | 4,056 | 29.5 | 4.3 | $1.0 \%$ | - |  |  |
| $40-64$ | 10,411 | 55.0 | 4.5 | $1.4 \%$ | $0.3 \%$ |  |  |
| $65-$ | 10,320 | 73.5 | 4.7 | $3.0 \%$ | $0.4 \%$ |  |  |

The prevalence of individuals with a uric acid level of $7.1 \mathrm{mg} / \mathrm{dL}$ and above in FY 2011 was: $2.5 \%(4.7 \%$ for males and $0.3 \%$ for females) for age group $7-15 ; 7.9 \%$ ( $18.5 \%$ for males and $0.7 \%$ for females) for age group 16-39; $8.0 \%$ ( $18.1 \%$ for males and $1.1 \%$ for females) for age group 40-64; and $7.6 \%$ ( $14.4 \%$ for males and $2.1 \%$ for females) for age group 65 and above. On the other hand, the prevalence of individuals with a uric acid level of $7.1 \mathrm{mg} / \mathrm{dL}$ and above in FY 2013 for age groups $7-15,16-39,40-64$, and 65 and above were respectively $2.6 \%, 8.9 \%$, $8.4 \%$, and $9.0 \%$. The prevalence increased in all age groups.

| $\operatorname{RBC}\left(10^{6} / \mu \mathrm{L}\right) \quad$ (overall) |  |  |  |
| ---: | ---: | ---: | :--- |
| Age | Number of <br> examinees | Average age | Average <br> RBC |
| $0-6$ | 6,428 | 3.6 | 4.70 |
| $7-15$ | 11,474 | 11.0 | 4.80 |
| $16-39$ | 14,757 | 28.1 | 4.84 |
| $40-64$ | 23,649 | 54.0 | 4.71 |
| $65-$ | 16,723 | 73.7 | 4.56 |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  | (male) |
| ---: | :---: | ---: | :--- | ---: | ---: | ---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.69 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.99 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $5.80 \times 10^{6} / \mu \mathrm{L}$ <br> and above |  |  |
| $0-6$ | 3,253 | 3.6 | 4.72 | $0.0 \%$ | $0.6 \%$ | $0.2 \%$ |  |  |
| $7-15$ | 5,764 | 10.9 | 4.91 | $0.0 \%$ | $0.3 \%$ | $1.1 \%$ |  |  |
| $16-39$ | 5,966 | 27.7 | 5.21 | $0.0 \%$ | $0.1 \%$ | $4.4 \%$ |  |  |
| $40-64$ | 9,562 | 54.5 | 4.96 | $0.4 \%$ | $1.3 \%$ | $1.6 \%$ |  |  |
| $65-$ | 7,495 | 73.4 | 4.74 | $1.5 \%$ | $5.3 \%$ | $1.1 \%$ |  |  |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  | (female) |  |
| ---: | :---: | ---: | :--- | ---: | ---: | ---: | :---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.39 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.69 \times 106 / \mu \mathrm{L}$ <br> and below | $5.50 \times 10^{6} / \mu \mathrm{L}$ <br> and above |  |  |  |
| $0-6$ | 3,175 | 3.6 | 4.68 | $0.1 \%$ | $0.1 \%$ | $0.8 \%$ |  |  |  |
| $7-15$ | 5,710 | 11.0 | 4.69 | $0.0 \%$ | $0.1 \%$ | $0.8 \%$ |  |  |  |
| $16-39$ | 8,791 | 28.3 | 4.58 | $0.0 \%$ | $0.7 \%$ | $0.5 \%$ |  |  |  |
| $40-64$ | 14,087 | 53.7 | 4.54 | $0.2 \%$ | $0.8 \%$ | $0.4 \%$ |  |  |  |
| $65-$ | 9.228 | 73.8 | 4.42 | $0.8 \%$ | $3.3 \%$ | $0.4 \%$ |  |  |  |

FY 2012

| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ (overall) |  |  |  |  |
| ---: | ---: | ---: | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average <br> RBC |  |
| $0-6$ | 4,342 | 3.6 | 4.69 |  |
| $7-15$ | 7,435 | 10.9 | 4.80 |  |
| $16-39$ | 8,479 | 28.6 | 4.75 |  |
| $40-64$ | 19,552 | 55.0 | 4.61 |  |
| $65-$ | 18,636 | 73.5 | 4.45 |  |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  | (male) |
| ---: | ---: | ---: | :--- | ---: | ---: | ---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.69 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.99 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $5.80 \times 10^{6} / \mu \mathrm{L}$ <br> and above |  |  |
| $0-6$ | 2,166 | 3.6 | 4.72 | - | $0.9 \%$ | $0.4 \%$ |  |  |
| $7-15$ | 3,809 | 10.8 | 4.90 | $0.0 \%$ | $0.3 \%$ | $0.7 \%$ |  |  |
| $16-39$ | 3,230 | 27.9 | 5.17 | - | $0.1 \%$ | $3.5 \%$ |  |  |
| $40-64$ | 7,717 | 55.4 | 4.88 | $0.7 \%$ | $2.0 \%$ | $1.6 \%$ |  |  |
| $65-$ | 8,476 | 73.4 | 4.63 | $2.9 \%$ | $8.5 \%$ | $0.9 \%$ |  |  |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.39 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.69 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $5.50 \times 10^{6} / \mu \mathrm{L}$ <br> and above |
| $0-6$ | 2,176 | 3.6 | 4.67 | - | - | $0.9 \%$ |
| $7-15$ | 3,626 | 10.9 | 4.70 | - | $0.1 \%$ | $0.6 \%$ |
| $16-39$ | 5,249 | 29.1 | 4.49 | $0.2 \%$ | $1.0 \%$ | $0.4 \%$ |
| $40-64$ | 11,835 | 54.6 | 4.44 | $0.3 \%$ | $1.5 \%$ | $0.4 \%$ |
| $65-$ | 10,160 | 73.6 | 4.30 | $1.5 \%$ | $6.7 \%$ | $0.2 \%$ |

## RBC

FY 2013

| $\mathrm{RBC}(106 / \mu \mathrm{L})$ (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average <br> RBC |
| $0-6$ | 3,781 | 3.7 | 4.70 |
| $7-15$ | 6,421 | 10.8 | 4.81 |
| $16-39$ | 6,536 | 29.0 | 4.75 |
| $40-64$ | 16,920 | 55.3 | 4.62 |
| $65-$ | 18,955 | 73.5 | 4.46 |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  |
| ---: | :---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.69 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.99 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $5.80 \times 10^{6} / \mu \mathrm{L}$ <br> and above |  |
| $0-6$ | 1,942 | 3.7 | 4.73 | $0.1 \%$ | $0.5 \%$ | $0.3 \%$ |  |
| $7-15$ | 3,287 | 10.9 | 4.91 | - | $0.1 \%$ | $0.9 \%$ |  |
| $16-39$ | 2,480 | 28.3 | 5.16 | - | $0.2 \%$ | $3.7 \%$ |  |
| $40-64$ | 6,510 | 55.7 | 4.89 | $0.7 \%$ | $2.0 \%$ | $1.8 \%$ |  |
| $65-$ | 8,637 | 73.4 | 4.64 | $2.7 \%$ | $8.5 \%$ | $0.8 \%$ |  |


| $\mathrm{RBC}\left(10^{6} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  | (female) |
| ---: | :---: | ---: | :--- | ---: | ---: | ---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> RBC | $3.39 \times 10^{6} / \mu \mathrm{L}$ <br> and below | $3.69 \times 106 / \mu \mathrm{L}$ <br> and below | $5.50 \times 10^{6} / \mu \mathrm{L}$ <br> and above |  |  |
| $0-6$ | 1,839 | 3.7 | 4.68 | $0.1 \%$ | $0.1 \%$ | $0.8 \%$ |  |  |
| $7-15$ | 3,134 | 10.8 | 4.70 | - | $0.1 \%$ | $0.6 \%$ |  |  |
| $16-39$ | 4,056 | 29.5 | 4.50 | $0.3 \%$ | $1.1 \%$ | $0.6 \%$ |  |  |
| $40-64$ | 10,410 | 55.0 | 4.45 | $0.3 \%$ | $1.7 \%$ | $0.3 \%$ |  |  |
| $65-$ | 10,318 | 73.5 | 4.31 | $1.6 \%$ | $6.2 \%$ | $0.3 \%$ |  |  |

The prevalence by age group with an RBC of $3.69 \times 10^{6} / \mu \mathrm{L}$ and above among males for FY 2011 was: $0.0 \%$ for age group $0-6 ; 0.0 \%$ for age group $7-15 ; 0.0 \%$ for age group $16-39 ; 0.4 \%$ for age group $40-64$; and $1.5 \%$ for age group 65 and above. For FY 2012 the prevalence was: not applicable for age group $0-6 ; 0.0 \%$ for age group $7-15$; not applicable for age group 16-39; $0.7 \%$ for age group 40-64; and $2.9 \%$ for age group 65 and above. For FY 2013 the prevalence was: $0.1 \%$ for age group $0-6$; not applicable for age group $7-15$; not applicable for age group 16-39; $0.7 \%$ for age group 40-64; and $2.7 \%$ for age group 65 and above.
The prevalence by age group with an RBC of $3.39 \times 10^{6} / \mu \mathrm{L}$ and above among females in FY 2011 was: $0.1 \%$ for age group $0-6 ; 0.0 \%$ for age group $7-15 ; 0.0 \%$ for age group $16-39 ; 0.2 \%$ for age group $40-64 ; 0.8 \%$ for age group 65 and above. For FY 2012 the prevalence was: not applicable for age group $0-6$; not applicable for age group $7-15 ; 0.2 \%$ for age group $16-39 ; 0.3 \%$ for age group 40-64; and $1.5 \%$ for age group 65 and above. For FY 2013 the prevalence was: $0.1 \%$ for age group $0-6$; not applicable for age group $7-15 ; 0.3 \%$ for age group $16-39 ; 0.3 \%$ for age group 40-64; and $1.6 \%$ for age group 65 and above.

There were no significant differences in the average values of each age group through FY 2011-2013, but there was a high prevalence of polycythemia among 16-39 year old males.

## Hemoglobin

FY 2011

| Hemoglobin (g/dL) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average <br> hemoglobin |
| $0-6$ | 6,428 | 3.6 | 12.6 |
| $7-15$ | 11,475 | 11.0 | 13.6 |
| $16-39$ | 14,757 | 28.1 | 14.3 |
| $40-64$ | 23,649 | 54.0 | 14.3 |
| $65-$ | 16,723 | 73.7 | 14.1 |


| Hemoglobin (g/dL ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hemoglobin | $12.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $13.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $18.0 \mathrm{~g} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | 3,253 | 3.6 | 12.5 | $24.5 \%$ | $74.2 \%$ | - |  |
| $7-15$ | 5,765 | 10.9 | 13.8 | $3.8 \%$ | $24.8 \%$ | $0.0 \%$ |  |
| $16-39$ | 5,966 | 27.7 | 15.9 | $0.3 \%$ | $0.6 \%$ | $1.7 \%$ |  |
| $40-64$ | 9,562 | 54.5 | 15.5 | $0.8 \%$ | $2.4 \%$ | $1.5 \%$ |  |
| $65-$ | 7,495 | 73.4 | 14.9 | $3.1 \%$ | $8.8 \%$ | $1.4 \%$ |  |


| Hemoglobin (g/dL ) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: |
| Age (female) |  |  |  |  |  |  |  |
| $0-6$ | 3,175 | 3.6 | 12.6 | $3.1 \%$ | $23.8 \%$ | - |  |
| $7-15$ | 5,710 | 11.0 | 13.3 | $1.6 \%$ | $7.6 \%$ | $0.1 \%$ |  |
| $16-39$ | 8,791 | 28.3 | 13.3 | $5.7 \%$ | $13.2 \%$ | $0.4 \%$ |  |
| $40-64$ | 14,087 | 53.7 | 13.4 | $5.6 \%$ | $11.4 \%$ | $1.0 \%$ |  |
| $65-$ | 9,228 | 73.8 | 13.5 | $2.7 \%$ | $10.5 \%$ | $1.0 \%$ |  |


| Hemoglobin (g/dL) (overall) |  |  |  |  |
| ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average age | Average <br> hemoglobin |  |
| $0-6$ | 4,342 | 3.6 | 12.6 |  |
| $7-15$ | 7,435 | 10.9 | 13.6 |  |
| $16-39$ | 8,479 | 28.6 | 14.1 |  |
| $40-64$ | 19,552 | 55.0 | 14.0 |  |
| $65-$ | 18,636 | 73.5 | 13.8 |  |


| $H$ |  |  |  |  |  |  |  | Hemoglobin (g/dL ) (male) <br> Age |  | Number of <br> examinees | Average <br> age | Average <br> hemoglobin | $12.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $13.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $18.0 \mathrm{~g} / \mathrm{dL}$ <br> and above |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | 2,166 | 3.6 | 12.6 | $25.3 \%$ | $71.4 \%$ | - |  |  |  |  |  |  |  |  |  |
| $7-15$ | 3,809 | 10.8 | 13.8 | $3.2 \%$ | $21.9 \%$ | - |  |  |  |  |  |  |  |  |  |
| $16-39$ | 3,230 | 27.9 | 15.7 | $0.2 \%$ | $0.5 \%$ | $1.0 \%$ |  |  |  |  |  |  |  |  |  |
| $40-64$ | 7,717 | 55.4 | 15.2 | $0.9 \%$ | $3.5 \%$ | $1.2 \%$ |  |  |  |  |  |  |  |  |  |
| $65-$ | 8,476 | 73.4 | 14.6 | $4.0 \%$ | $12.8 \%$ | $0.8 \%$ |  |  |  |  |  |  |  |  |  |


| Hemoglobin (g/dL ) |  |  |  |  |  |  |  | (female) |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hemoglobin | $11.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $12.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $16.0 \mathrm{~g} / \mathrm{dL}$ <br> and above |  |  |
| $0-6$ | 2,176 | 3.6 | 12.6 | $3.2 \%$ | $23.1 \%$ | $0.0 \%$ |  |  |
| $7-15$ | 3,626 | 10.9 | 13.4 | $1.0 \%$ | $6.2 \%$ | $0.2 \%$ |  |  |
| $16-39$ | 5,249 | 29.1 | 13.1 | $6.0 \%$ | $15.3 \%$ | $0.4 \%$ |  |  |
| $40-64$ | 11,835 | 54.6 | 13.2 | $5.0 \%$ | $12.5 \%$ | $0.7 \%$ |  |  |
| $65-$ | 10,160 | 73.6 | 13.1 | $3.7 \%$ | $15.4 \%$ | $0.4 \%$ |  |  |

FY 2013

| Hemoglobin (g/dL) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average <br> hemoglobin |
| $0-6$ | 3,781 | 3.7 | 12.6 |
| $7-15$ | 6,421 | 10.8 | 13.6 |
| $16-39$ | 6,536 | 29.0 | 14.1 |
| $40-64$ | 16,920 | 55.3 | 14.1 |
| $65-$ | 18,955 | 73.5 | 13.9 |


| Hemoglobin (g/dL ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hemoglobin | $12.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $13.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $18.0 \mathrm{~g} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | 1,942 | 3.7 | 12.6 | $25.0 \%$ | $71.7 \%$ | - |  |
| $7-15$ | 3,287 | 10.9 | 13.8 | $2.5 \%$ | $23.4 \%$ | $0.0 \%$ |  |
| $16-39$ | 2,480 | 28.3 | 15.7 | $0.2 \%$ | $0.6 \%$ | $0.9 \%$ |  |
| $40-64$ | 6,510 | 55.7 | 15.3 | $1.0 \%$ | $2.8 \%$ | $1.4 \%$ |  |
| $65-$ | 8,637 | 73.4 | 14.7 | $3.7 \%$ | $11.3 \%$ | $1.1 \%$ |  |


| Hemoglobin (g/dL ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hemoglobin | $11.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $12.0 \mathrm{~g} / \mathrm{dL}$ <br> and below | $16.0 \mathrm{~g} / \mathrm{dL}$ <br> and above |  |
| $0-6$ | 1,839 | 3.7 | 12.6 | $3.8 \%$ | $22.0 \%$ | - |  |
| $7-15$ | 3,134 | 10.8 | 13.4 | $1.1 \%$ | $5.9 \%$ | $0.1 \%$ |  |
| $16-39$ | 4,056 | 29.5 | 13.2 | $4.9 \%$ | $13.6 \%$ | $0.4 \%$ |  |
| $40-64$ | 10,410 | 55.0 | 13.3 | $4.2 \%$ | $11.0 \%$ | $0.8 \%$ |  |
| $65-$ | 10,318 | 73.5 | 13.3 | $3.1 \%$ | $13.4 \%$ | $0.6 \%$ |  |

The prevalence based on age groups for males with $12.0 \mathrm{~g} / \mathrm{dL}$ and above hemoglobin in FY 2011 was: $24.5 \%$ for age group $0-6 ; 3.8 \%$ for age group $7-15 ; 0.3 \%$ for age group $16-39 ; 0.8 \%$ for age group 40-64; and 3.1\% for age group 65 and above. The prevalence for FY 2012 was: 25.3\% for age group 0-6; $3.2 \%$ for age group $7-15 ; 0.2 \%$ for age group 16-39; $0.9 \%$ for age group 40-64; and $4.0 \%$ for age group 65 and above. The prevalence for FY 2013 was: $25.0 \%$ for age group $0-6 ; 2.5 \%$ for age group $7-15 ; 0.2 \%$ for age group 16-39; $1.0 \%$ for age group $40-64 ; 3.7 \%$ for age group 65 and above.

The prevalence based on age groups for females with $11.0 \mathrm{~g} / \mathrm{dL}$ and above hemoglobin in FY 2011 was: $3.1 \%$ for age group $0-6 ; 1.6 \%$ for age group $7-15 ; 5.7 \%$ for age group 16-39; $5.6 \%$ for age group 40-64; and 2.7\% for age group 65 and above. The prevalence for FY 2012 was: 3.2\% for age group $0-6 ; 1.0 \%$ for age group $7-15 ; 6.0 \%$ for age group 16-39; $5.0 \%$ for age group 40-64; $3.7 \%$ for age group 65 and above. The prevalence for FY 2013 was: $3.8 \%$ for age group 0-6; $1.1 \%$ for age group $7-15$; 4.9\% for age group 16-39; 4.2\% for age group 40-64; and 3.1\% for age group 65 and above.

Further, there were no significant differences in the average value of each age group throughout FY 2011-2013

## Hematocrit

FY 2011

| Hematocrit (\%) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average <br> hematocrit |
| $0-6$ | 6,428 | 3.6 | 37.3 |
| $7-15$ | 11,475 | 11.0 | 40.3 |
| $16-39$ | 14,757 | 28.1 | 42.9 |
| $40-64$ | 23,649 | 54.0 | 42.8 |
| $65-$ | 16,723 | 73.7 | 42.4 |


| Hematocrit (\%) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hematocrit | $\leq 35.9 \%$ | $\leq 37.9 \%$ | $\geq 55.0 \%$ |  |
| $0-6$ | 3,253 | 3.6 | 37.2 | $28.4 \%$ | $64.4 \%$ | - |  |
| $7-15$ | 5,765 | 10.9 | 40.9 | $5.2 \%$ | $19.0 \%$ | - |  |
| $16-39$ | 5,966 | 27.7 | 46.7 | $0.2 \%$ | $0.3 \%$ | $0.1 \%$ |  |
| $40-64$ | 9,562 | 54.5 | 45.8 | $0.6 \%$ | $1.3 \%$ | $0.2 \%$ |  |
| $65-$ | 7,495 | 73.4 | 44.3 | $2.2 \%$ | $4.8 \%$ | $0.3 \%$ |  |


| Hematocrit (\%) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hematocrit | $\leq 28.9 \%$ | $\leq 32.9 \%$ | $\geq 48.0 \%$ |  |
| $0-6$ | 3,175 | 3.6 | 37.4 | $0.2 \%$ | $2.1 \%$ | - |  |
| $7-15$ | 5,710 | 11.0 | 39.8 | $0.2 \%$ | $0.9 \%$ | $0.1 \%$ |  |
| $16-39$ | 8,791 | 28.3 | 40.3 | $0.4 \%$ | $2.3 \%$ | $0.2 \%$ |  |
| $40-64$ | 14,087 | 53.7 | 40.7 | $0.6 \%$ | $2.9 \%$ | $0.6 \%$ |  |
| $65-$ | 9,228 | 73.8 | 40.8 | $0.2 \%$ | $1.2 \%$ | $0.9 \%$ |  |

FY 2012

| Hematocrit (\%) (overall) |  |  |  |  |
| ---: | ---: | ---: | :--- | :---: |
| Age | Number of <br> examinees | Average age | Average <br> hematocrit |  |
| $0-6$ | 4,342 | 3.6 | 37.7 |  |
| $7-15$ | 7,435 | 10.9 | 40.8 |  |
| $16-39$ | 8,480 | 28.6 | 42.7 |  |
| $40-64$ | 19,552 | 55.0 | 42.7 |  |
| $65-$ | 18,636 | 73.5 | 42.2 |  |


| Hematocrit (\%) (male) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> hematocrit | $\leq 35.9 \%$ | $\leq 37.9 \%$ | $\geq 55.0 \%$ |
| 0-6 | 2,166 | 3.6 | 37.6 | 24.1\% | 56.6\% | - |
| 7-15 | 3,809 | 10.8 | 41.3 | 2.8\% | 12.9\% | - |
| 16-39 | 3,230 | 27.9 | 46.8 | 0.1\% | 0.2\% | 0.2\% |
| 40-64 | 7,717 | 55.4 | 45.8 | 0.6\% | 1.3\% | 0.4\% |
| 65- | 8,476 | 73.4 | 44.2 | 2.6\% | 6.1\% | 0.4\% |


| Hematocrit (\%) (female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age |  | Average <br> hematocrit | $\leq 28.9 \%$ | $\leq 32.9 \%$ |  |
| $0-6$ | 2,176 | 3.6 | 37.9 | $0.1 \%$ | $1.4 \%$ | $0.0 \%$ |  |
| $7-15$ | 3,626 | 10.9 | 40.4 | $0.0 \%$ | $0.4 \%$ | $0.2 \%$ |  |
| $16-39$ | 5,250 | 29.1 | 40.2 | $0.3 \%$ | $2.2 \%$ | $0.4 \%$ |  |
| $40-64$ | 11,835 | 54.6 | 40.7 | $0.4 \%$ | $2.2 \%$ | $1.0 \%$ |  |
| $65-$ | 10,160 | 73.6 | 40.5 | $0.3 \%$ | $1.7 \%$ | $0.9 \%$ |  |

## Hematocrit

FY 2013

| Hematocrit (\%) (overall) |  |  |  |
| ---: | ---: | ---: | ---: |
| Age | Number of <br> examinees | Average age | Average <br> hematocrit |
| $0-6$ | 3,781 | 3.7 | 37.3 |
| $7-15$ | 6,421 | 10.8 | 40.3 |
| $16-39$ | 6,536 | 29.0 | 42.4 |
| $40-64$ | 16,920 | 55.3 | 42.3 |
| $65-$ | 18,955 | 73.5 | 41.8 |


| Hematocrit (\%) (male) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> hematocrit | $\leq 35.9 \%$ | $\leq 37.9 \%$ | $\geq 55.0 \%$ |
| 0-6 | 1,942 | 3.7 | 37.2 | 29.0\% | 62.5\% | - |
| 7-15 | 3,287 | 10.9 | 40.8 | 4.5\% | 18.2\% | - |
| 16-39 | 2,480 | 28.3 | 46.3 | 0.2\% | 0.4\% | 0.1\% |
| 40-64 | 6,510 | 55.7 | 45.4 | 0.7\% | 1.6\% | 0.3\% |
| 65- | 8,637 | 73.4 | 43.7 | 3.2\% | 7.1\% | 0.3\% |


| Hematocrit (\%) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> hematocrit | $\leq 28.9 \%$ | $\leq 32.9 \%$ | $\geq 48.0 \%$ |  |
| $0-6$ | 1,839 | 3.7 | 37.5 | $0.1 \%$ | $2.9 \%$ | - |  |
| $7-15$ | 3,134 | 10.8 | 39.8 | $0.1 \%$ | $0.7 \%$ | $0.1 \%$ |  |
| $16-39$ | 4,056 | 29.5 | 40.0 | $0.4 \%$ | $2.3 \%$ | $0.3 \%$ |  |
| $40-64$ | 10,410 | 55.0 | 40.4 | $0.5 \%$ | $2.3 \%$ | $0.7 \%$ |  |
| $65-$ | 10,318 | 73.5 | 40.2 | $0.2 \%$ | $2.0 \%$ | $0.8 \%$ |  |

The prevalence based on age groups for males with $35.9 \%$ and below hematocrit in FY 2011 was: $28.4 \%$ for age group $0-6 ; 5.2 \%$ for age group $7-15 ; 0.2 \%$ for age group $16-39 ; 0.6 \%$ for age group 40-64; and $2.2 \%$ for age group 65 and above. The prevalence for FY 2012 was $24.1 \%$ for age group $0-6 ; 2.8 \%$ for age group $7-15 ; 0.1 \%$ for age group $16-39 ; 0.6 \%$ for age group $40-64$; $2.6 \%$ for age group 65 and above. For FY 2013 the prevalence was: $29.0 \%$ for age group $0-6$; $4.5 \%$ for age group $7-15 ; 0.2 \%$ for age group $16-39 ; 0.7 \%$ for age group $40-64$; and $3.2 \%$ for age group 65 and above.
The prevalence based on age groups for females with 28.9\% and above hematocrit in FY 2011
was: $0.2 \%$ for age group $0-6 ; 0.2 \%$ for age group $7-15 ; 0.4 \%$ for age group $16-39 ; 0.6 \%$ for age group $40-64 ; 0.2 \%$ for age group 65 and above. For FY 2012 the prevalence was: $0.1 \%$ for age group $0-6 ; 0.0 \%$ for age group $7-15 ; 0.3 \%$ for age group $16-39 ; 0.4 \%$ for age group $40-64$; and $0.3 \%$ for age group 65 and above. For FY 2013 the prevalence was: $0.1 \%$ for age group $0-6$; $0.1 \%$ for age group $7-15 ; 0.4 \%$ for age group $16-39 ; 0.5 \%$ for age group $40-64$; and $0.2 \%$ for age group 65 and above.

Further there was no significant change in the average value of each age group throughout FY 2011-2013.

## Platelet count

FY 2011

| Platelet count ( $10^{3} / \mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 6,423 | 3.6 | 321.9 | 0.2\% | 0.5\% | 22.5\% | 6.1\% |
| 7-15 | 11,471 | 11.0 | 275.4 | 0.0\% | 0.2\% | 6.4\% | 0.9\% |
| 16-39 | 14,703 | 28.1 | 263.9 | 0.0\% | 0.2\% | 4.5\% | 0.6\% |
| 40-64 | 23,479 | 54.0 | 254.2 | 0.2\% | 0.8\% | 3.7\% | 0.6\% |
| 65- | 16,535 | 73.7 | 230.9 | 0.3\% | 1.9\% | 1.7\% | 0.3\% |


| Platelet count $\left(10^{3} / \mu \mathrm{L}\right)$ (male) |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |  |
| $0-6$ | 3,251 | 3.6 | 321.2 | $0.3 \%$ | $0.5 \%$ | $22.3 \%$ | $6.4 \%$ |  |
| $7-15$ | 5,763 | 10.9 | 277.4 | - | $0.1 \%$ | $7.2 \%$ | $1.0 \%$ |  |
| $16-39$ | 5,951 | 27.7 | 252.7 | $0.0 \%$ | $0.2 \%$ | $2.4 \%$ | $0.2 \%$ |  |
| $40-64$ | 9,495 | 54.5 | 242.4 | $0.3 \%$ | $1.2 \%$ | $2.1 \%$ | $0.3 \%$ |  |
| $65-$ | 7,412 | 73.4 | 220.7 | $0.2 \%$ | $2.7 \%$ | $1.4 \%$ | $0.4 \%$ |  |


| Age |  |  |  |  |  |  |  |  | Number of <br> examinees | Average <br> age | Average <br> platelet <br> count | $\left.89 \times 10^{3} / \mu \mathrm{L}\right)$ <br> and below <br> (female) | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | 3,172 | 3.6 | 322.5 | $0.2 \%$ | $0.4 \%$ | $22.7 \%$ | $5.7 \%$ |  |  |  |  |  |  |  |  |
| $7-15$ | 5,708 | 11.0 | 273.5 | $0.1 \%$ | $0.3 \%$ | $5.6 \%$ | $0.8 \%$ |  |  |  |  |  |  |  |  |
| $16-39$ | 8,752 | 28.3 | 271.6 | $0.0 \%$ | $0.2 \%$ | $5.9 \%$ | $1.0 \%$ |  |  |  |  |  |  |  |  |
| $40-64$ | 13,984 | 53.7 | 262.2 | $0.2 \%$ | $0.6 \%$ | $4.9 \%$ | $0.9 \%$ |  |  |  |  |  |  |  |  |
| $65-$ | 9,123 | 73.8 | 239.2 | $0.3 \%$ | $1.2 \%$ | $2.0 \%$ | $0.3 \%$ |  |  |  |  |  |  |  |  |

## FY 2012

| Age |  |  |  |  |  |  |  |  | Number of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ ) <br> (overall) <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | 4,336 | 3.6 | 323.3 | $0.2 \%$ | $0.4 \%$ | $23.4 \%$ | $6.3 \%$ |  |  |  |  |  |  |  |  |
| $7-15$ | 7,431 | 10.9 | 275.0 | $0.0 \%$ | $0.2 \%$ | $5.9 \%$ | $0.6 \%$ |  |  |  |  |  |  |  |  |
| $16-39$ | 8,467 | 28.6 | 257.0 | $0.1 \%$ | $0.3 \%$ | $3.2 \%$ | $0.5 \%$ |  |  |  |  |  |  |  |  |
| $40-64$ | 19,485 | 55.0 | 244.9 | $0.3 \%$ | $1.0 \%$ | $2.7 \%$ | $0.4 \%$ |  |  |  |  |  |  |  |  |
| $65-$ | 18,563 | 73.5 | 221.6 | $0.4 \%$ | $2.7 \%$ | $1.2 \%$ | $0.3 \%$ |  |  |  |  |  |  |  |  |


| Platelet count $\left(10^{3} / \mu \mathrm{L}\right)($ male $)$ |  |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Age | Number <br> of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |  |
| $0-6$ | 2,164 | 3.6 | 321.1 | $0.0 \%$ | $0.3 \%$ | $22.8 \%$ | $6.0 \%$ |  |
| $7-15$ | 3,807 | 10.8 | 276.3 | - | $0.3 \%$ | $6.1 \%$ | $0.6 \%$ |  |
| $16-39$ | 3,225 | 27.8 | 249.4 | - | $0.3 \%$ | $1.6 \%$ | $0.1 \%$ |  |
| $40-64$ | 7,691 | 55.4 | 237.3 | $0.4 \%$ | $1.4 \%$ | $2.0 \%$ | $0.3 \%$ |  |
| $65-$ | 8,439 | 73.4 | 213.8 | $0.4 \%$ | $3.5 \%$ | $0.9 \%$ | $0.3 \%$ |  |


| Platelet count $\left(10^{3} / \mu \mathrm{L}\right)$ |  |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| (female) |  |  |  |  |  |  |  |  |
| Age <br> of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |  |  |
| $0-6$ | 2,172 | 3.6 | 325.4 | $0.3 \%$ | $0.6 \%$ | $24.0 \%$ | $6.7 \%$ |  |
| $7-15$ | 3,624 | 10.9 | 273.6 | $0.0 \%$ | $0.1 \%$ | $5.7 \%$ | $0.5 \%$ |  |
| $16-39$ | 5,242 | 29.1 | 261.7 | $0.1 \%$ | $0.4 \%$ | $4.2 \%$ | $0.7 \%$ |  |
| $40-64$ | 11,794 | 54.6 | 249.9 | $0.2 \%$ | $0.8 \%$ | $3.1 \%$ | $0.4 \%$ |  |
| $65-$ | 10,124 | 73.6 | 228.2 | $0.4 \%$ | $2.1 \%$ | $1.5 \%$ | $0.3 \%$ |  |

## Platelet count

FY 2013

| Platelet count ( $10^{3} / \mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 3,778 | 3.7 | 324.7 | 0.0\% | 0.3\% | 23.9\% | 6.2\% |
| 7-15 | 6,420 | 10.8 | 279.5 | 0.0\% | 0.1\% | 6.3\% | 0.8\% |
| 16-39 | 6,528 | 29.0 | 262.6 | 0.1\% | 0.4\% | 4.1\% | 0.5\% |
| 40-64 | 16,872 | 55.3 | 249.7 | 0.2\% | 0.9\% | 3.3\% | 0.6\% |
| 65- | 18,878 | 73.5 | 225.1 | 0.4\% | 2.2\% | 1.3\% | 0.3\% |


| Platelet count $\left(10^{3} / \mu \mathrm{L}\right)$ (male) |  |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Age | Number <br> of <br> examinees | Average <br> age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |  |
| $0-6$ | 1,941 | 3.7 | 324.4 | - | $0.4 \%$ | $24.3 \%$ | $6.6 \%$ |  |
| $7-15$ | 3,287 | 10.9 | 280.5 | - | $0.1 \%$ | $7.0 \%$ | $0.9 \%$ |  |
| $16-39$ | 2,479 | 28.3 | 254.5 | $0.0 \%$ | $0.4 \%$ | $2.7 \%$ | $0.2 \%$ |  |
| $40-64$ | 6,494 | 55.7 | 242.8 | $0.3 \%$ | $1.2 \%$ | $2.5 \%$ | $0.3 \%$ |  |
| $65-$ | 8,603 | 73.4 | 217.5 | $0.4 \%$ | $3.0 \%$ | $1.1 \%$ | $0.3 \%$ |  |


| Platelet count ( $10^{3} / \mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of <br> examinees | Average age | Average <br> platelet <br> count | $89 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $129 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $370 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $450 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 1,837 | 3.7 | 325.0 | 0.1\% | 0.3\% | 23.6\% | 5.8\% |
| 7-15 | 3,133 | 10.8 | 278.5 | 0.0\% | 0.1\% | 5.6\% | 0.8\% |
| 16-39 | 4,049 | 29.5 | 267.6 | 0.2\% | 0.4\% | 4.9\% | 0.7\% |
| 40-64 | 10,378 | 55.0 | 253.9 | 0.2\% | 0.7\% | 3.8\% | 0.7\% |
| 65- | 10,275 | 73.5 | 231.4 | 0.3\% | 1.5\% | 1.4\% | 0.3\% |

The prevalence of individuals with the platelet count of $89 \times 10^{3} / \mu \mathrm{L}$ and below was: $0.2 \%$ ( $0.3 \%$ for males and $0.2 \%$ for females) for age group $0-6 ; 0.0 \%$ (not applicable for males and $0.1 \%$ for females) for age group $7-15 ; 0.0 \%$ ( $0.0 \%$ for males and $0.0 \%$ for females) for age group
$16-39 ; 0.2 \%(0.3 \%$ for males and $0.2 \%$ for females) for age group $40-64$; and $0.3 \%(0.2 \%$ for males and $0.3 \%$ for females) for age group 65 and above.

Further, there were no significant changes in the average value of all age groups throughout FY 2011-2013.

## WBC

FY 2011

| WBC ( $10^{3} / \mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average age | Average WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 6,429 | 3.6 | 8.5 | 0.1\% | 0.6\% | 28.1\% | 13.0\% |
| 7-15 | 11,475 | 11.0 | 6.5 | 0.2\% | 3.7\% | 5.8\% | 2.0\% |
| 16-39 | 14,757 | 28.1 | 6.1 | 0.6\% | 6.4\% | 4.1\% | 1.4\% |
| 40-64 | 23,649 | 54.0 | 5.9 | 0.8\% | 8.2\% | 3.0\% | 1.0\% |
| 65- | 16,723 | 73.7 | 5.9 | 0.6\% | 6.8\% | 2.3\% | 0.7\% |


| WBC $\left(10^{3} / \mu \mathrm{L}\right)$ (male) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average age | Average WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 3,253 | 3.6 | 8.5 | 0.1\% | 0.7\% | 28.3\% | 12.9\% |
| 7-15 | 5,765 | 10.9 | 6.5 | 0.2\% | 3.4\% | 6.0\% | 2.1\% |
| 16-39 | 5,966 | 27.7 | 6.3 | 0.3\% | 4.6\% | 4.6\% | 1.6\% |
| 40-64 | 9,562 | 54.5 | 6.4 | 0.3\% | 4.0\% | 5.1\% | 1.8\% |
| 65- | 7,495 | 73.4 | 6.2 | 0.3\% | 4.8\% | 3.1\% | 1.1\% |


| WBC ( $\left.10^{3} / \mu \mathrm{L}\right)$ (female) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average <br> age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 3,176 | 3.6 | 8.5 | 0.1\% | 0.4\% | 27.9\% | 13.0\% |
| 7-15 | 5,710 | 11.0 | 6.5 | 0.2\% | 4.0\% | 5.7\% | 1.8\% |
| 16-39 | 8,791 | 28.3 | 6.0 | 0.9\% | 7.6\% | 3.8\% | 1.3\% |
| 40-64 | 14,087 | 53.7 | 5.6 | 1.1\% | 11.1\% | 1.6\% | 0.5\% |
| 65- | 9,228 | 73.8 | 5.8 | 0.9\% | 8.5\% | 1.7\% | 0.5\% |

FY 2012

| WBC $\left(10^{3} / \mu \mathrm{L}\right)$ (overall) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of <br> examinees | Average age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 4,342 | 3.6 | 8.6 | 0.1\% | 0.4\% | 29.1\% | 13.4\% |
| 7-15 | 7,435 | 10.9 | 6.5 | 0.2\% | 2.6\% | 6.0\% | 2.0\% |
| 16-39 | 8,480 | 28.6 | 6.0 | 0.7\% | 7.8\% | 3.6\% | 1.3\% |
| 40-64 | 19,551 | 55.0 | 5.8 | 0.9\% | 9.7\% | 2.6\% | 0.8\% |
| 65- | 18,637 | 73.5 | 5.7 | 0.8\% | 8.3\% | 1.7\% | 0.5\% |


| WBC |  |  |  |  |  |  |  |  | $\left(10^{3} / \mu \mathrm{L}\right)($ male $)$ |
| ---: | ---: | :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Age | Number <br> of <br> examinees | Average <br> age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |  |  |
| $0-6$ | 2,166 | 3.6 | 8.6 | $0.0 \%$ | $0.3 \%$ | $29.3 \%$ | $13.2 \%$ |  |  |
| $7-15$ | 3,809 | 10.8 | 6.5 | $0.2 \%$ | $2.7 \%$ | $6.5 \%$ | $2.2 \%$ |  |  |
| $16-39$ | 3,230 | 27.9 | 6.1 | $0.4 \%$ | $5.3 \%$ | $4.1 \%$ | $1.6 \%$ |  |  |
| $40-64$ | 7,717 | 55.4 | 6.2 | $0.3 \%$ | $5.1 \%$ | $4.3 \%$ | $1.4 \%$ |  |  |
| $65-$ | 8,476 | 73.4 | 6.0 | $0.5 \%$ | $6.1 \%$ | $2.4 \%$ | $0.7 \%$ |  |  |


| WBC ( $\left.10^{3} / \mu \mathrm{L}\right)$ (female) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of <br> examinees | Average <br> age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 2,176 | 3.6 | 8.6 | 0.1\% | 0.5\% | 29.0\% | 13.5\% |
| 7-15 | 3,626 | 10.9 | 6.5 | 0.2\% | 2.5\% | 5.4\% | 1.8\% |
| 16-39 | 5,250 | 29.1 | 5.9 | 0.9\% | 9.4\% | 3.4\% | 1.1\% |
| 40-64 | 11,834 | 54.6 | 5.5 | 1.3\% | 12.6\% | 1.5\% | 0.4\% |
| 65- | 10,161 | 73.6 | 5.5 | 1.0\% | 10.2\% | 1.2\% | 0.4\% |

## WBC

FY 2013

| WBC ( $10^{3} / \mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 3,781 | 3.7 | 8.6 | - | 0.3\% | 30.0\% | 13.5\% |
| 7-15 | 6,421 | 10.8 | 6.6 | 0.1\% | 2.3\% | 6.6\% | 2.2\% |
| 16-39 | 6,536 | 29.0 | 6.1 | 0.4\% | 7.2\% | 3.6\% | 1.4\% |
| 40-64 | 16,920 | 55.3 | 5.8 | 0.8\% | 9.0\% | 2.8\% | 0.9\% |
| 65- | 18,955 | 73.5 | 5.8 | 0.7\% | 7.6\% | 2.0\% | 0.7\% |


| WBC ( $10^{3} / \mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average <br> age | Average <br> WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 1,942 | 3.7 | 8.6 | - | 0.3\% | 30.1\% | 14.2\% |
| 7-15 | 3,287 | 10.9 | 6.6 | 0.0\% | 2.6\% | 7.0\% | 2.2\% |
| 16-39 | 2,480 | 28.3 | 6.2 | 0.2\% | 6.1\% | 3.5\% | 1.5\% |
| 40-64 | 6,510 | 55.7 | 6.3 | 0.3\% | 4.7\% | 4.8\% | 1.6\% |
| 65- | 8,637 | 73.4 | 6.0 | 0.4\% | 5.5\% | 2.6\% | 0.9\% |


| WBC ( $\left.10^{3} / \mu \mathrm{L}\right)$ (female) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number <br> of examinees | Average age | Average WBC | $2.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $3.9 \times 10^{3} / \mu \mathrm{L}$ <br> and below | $9.6 \times 10^{3} / \mu \mathrm{L}$ <br> and above | $11.1 \times 10^{3} / \mu \mathrm{L}$ <br> and above |
| 0-6 | 1,839 | 3.7 | 8.6 | - | 0.2\% | 30.0\% | 12.9\% |
| 7-15 | 3,134 | 10.8 | 6.7 | 0.2\% | 2.1\% | 6.2\% | 2.3\% |
| 16-39 | 4,056 | 29.5 | 6.0 | 0.5\% | 7.9\% | 3.6\% | 1.3\% |
| 40-64 | 10,410 | 55.0 | 5.5 | 1.0\% | 11.7\% | 1.5\% | 0.4\% |
| 65- | 10,318 | 73.5 | 5.6 | 1.0\% | 9.3\% | 1.4\% | 0.5\% |

The prevalence of WBC $2.9 \times 10^{3} / \mu \mathrm{L}$ and below for FY 2011 was: $0.1 \%$ ( $0.1 \%$ for males and $0.1 \%$ for females) for age group $0-6 ; 0.2 \%(0.2 \%$ for males and $0.2 \%$ for females) for age group $7-15 ; 0.6 \%(0.3 \%$ for males and $0.9 \%$ for females) for age group $16-39 ; 0.8 \% ~(0.3 \%$ for males and $1.1 \%$ for females) for age group $40-64 ; 0.6 \%$ ( $0.3 \%$ for males and $0.9 \%$ for females) for age group 65 and above.

Further, there were no significant changes in average WBC among all age groups throughout FY 2011-2013.

## Differential white blood count (neutrophil)

FY 2011

| Neutrophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | 500/ $\mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 6,418 | 3.6 | 3,666 | 198 | 16,770 | $0.0 \%$ |  |
| $7-15$ | 11,470 | 11.0 | 3,373 | 324 | 13,876 | $0.0 \%$ |  |
| $16-39$ | 14,746 | 28.1 | 3,465 | 531 | 17,313 | - |  |
| $40-64$ | 23,643 | 54.0 | 3,250 | 266 | 19,388 | $0.0 \%$ |  |
| $65-$ | 16,719 | 73.7 | 3,275 | 336 | 17,553 | $0.0 \%$ |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 3,247 | 3.6 | 3,683 | 558 | 15,566 | - |  |
| $7-15$ | 5,762 | 10.9 | 3,321 | 324 | 12,901 | $0.0 \%$ |  |
| $16-39$ | 5,962 | 27.7 | 3,428 | 531 | 14,977 | - |  |
| $40-64$ | 9,559 | 54.5 | 3,494 | 379 | 15,222 | $0.0 \%$ |  |
| $65-$ | 7,495 | 73.4 | 3,423 | 336 | 17,553 | $0.0 \%$ |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 3,171 | 3.6 | 3,649 | 198 | 16,770 | $0.1 \%$ |  |
| $7-15$ | 5,708 | 11.0 | 3,425 | 336 | 13,876 | $0.0 \%$ |  |
| $16-39$ | 8,784 | 28.3 | 3,490 | 581 | 17,313 | - |  |
| $40-64$ | 14,084 | 53.7 | 3,085 | 266 | 19,388 | $0.0 \%$ |  |
| $65-$ | 9,224 | 73.8 | 3,156 | 474 | 15,709 | $0.0 \%$ |  |

FY 2012

| Neutrophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | 500/ $\mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 4,320 | 3.6 | 3,538 | 204 | 23,763 | $0.1 \%$ |  |
| $7-15$ | 7,429 | 10.9 | 3,299 | 664 | 17,052 | - |  |
| $16-39$ | 8,455 | 28.6 | 3,437 | 637 | 28,578 | - |  |
| $40-64$ | 19,473 | 55.0 | 3,213 | 554 | 20,720 | - |  |
| $65-$ | 18,547 | 73.5 | 3,204 | 451 | 18,990 | $0.0 \%$ |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | 500/ $\mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 2,158 | 3.6 | 3,555 | 204 | 14,164 | $0.1 \%$ |  |
| $7-15$ | 3,806 | 10.8 | 3,259 | 822 | 17,052 | - |  |
| $16-39$ | 3,219 | 27.9 | 3,397 | 805 | 12,797 | - |  |
| $40-64$ | 7,687 | 55.4 | 3,467 | 736 | 20,720 | - |  |
| $65-$ | 8,435 | 73.4 | 3,360 | 600 | 17,108 | - |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 2,162 | 3.6 | 3,521 | 315 | 23,763 | $0.0 \%$ |  |
| $7-15$ | 3,623 | 10.9 | 3,341 | 664 | 16,674 | - |  |
| $16-39$ | 5,236 | 29.1 | 3,461 | 637 | 28,578 | - |  |
| $40-64$ | 11,786 | 54.7 | 3,048 | 554 | 13,617 | - |  |
| $65-$ | 10,112 | 73.6 | 3,074 | 451 | 18,990 | $0.0 \%$ |  |

## Differential white blood count (neutrophil)

FY 2013

| Neutrophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | 500/ $\mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 3,777 | 3.7 | 3,476 | 525 | 14,067 | - |  |
| $7-15$ | 6,417 | 10.8 | 3,341 | 315 | 15,498 | $0.0 \%$ |  |
| $16-39$ | 6,526 | 29.0 | 3,482 | 702 | 16,789 | - |  |
| $40-64$ | 16,906 | 55.3 | 3,247 | 268 | 16,044 | $0.0 \%$ |  |
| $65-$ | 18,949 | 73.5 | 3,270 | 442 | 25,690 | $0.0 \%$ |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | 500/ $\mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 1,941 | 3.7 | 3,472 | 525 | 14,067 | - |  |
| $7-15$ | 3,284 | 10.9 | 3,255 | 315 | 11,914 | $0.0 \%$ |  |
| $16-39$ | 2,476 | 28.3 | 3,421 | 736 | 16,789 | - |  |
| $40-64$ | 6,505 | 55.7 | 3,499 | 603 | 14,328 | - |  |
| $65-$ | 8,633 | 73.4 | 3,428 | 528 | 21,549 | - |  |


| Neutrophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> neutrophil | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 1,836 | 3.7 | 3,480 | 526 | 12,243 | - |  |
| $7-15$ | 3,133 | 10.8 | 3,431 | 761 | 15,498 | - |  |
| $16-39$ | 4,050 | 29.5 | 3,520 | 702 | 13,513 | - |  |
| $40-64$ | 10,401 | 55.0 | 3,089 | 268 | 16,044 | $0.0 \%$ |  |
| $65-$ | 10,316 | 73.5 | 3,138 | 442 | 25,690 | $0.0 \%$ |  |

Average absolute neutrophil counts derived from the differential white cell counts in FY 2011 were: $3,666 / \mu \mathrm{L}(3,683 / \mu \mathrm{L}$ for males and $3,649 / \mu \mathrm{L}$ for females) for age group $0-6 ; 3,373 / \mu \mathrm{L}$ $(3,321 / \mu \mathrm{L}$ for males and $3,425 / \mu \mathrm{L}$ for females) for age group $7-15 ; 3,465 / \mu \mathrm{L}(3,428 / \mu \mathrm{L}$ for males and $3,490 / \mu \mathrm{L}$ for females) for age group $16-39 ; 3,250 / \mu \mathrm{L}(3,494 / \mu \mathrm{L}$ for males and $3,085 / \mu \mathrm{L}$ for females) for age group $40-64 ; 3,275 / \mu \mathrm{L}(3,423 / \mu \mathrm{L}$ for males and $3,156 / \mu \mathrm{L}$ for females) for age group 65 and above.
There were no significant differences in the average value of each age group throughout FY 2011-2013.

## Differential white blood count (lymphocyte)

FY 2011

| Lymphocyte (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |
| $0-6$ | 6,418 | 3.6 | 4,134 | 500 | 14,687 | $0.0 \%$ |
| $7-15$ | 11,470 | 11.0 | 2,524 | 210 | 6,890 | $0.1 \%$ |
| $16-39$ | 14,746 | 28.1 | 2,105 | 351 | 6,247 | $0.0 \%$ |
| $40-64$ | 23,643 | 54.0 | 2,125 | 350 | 35,322 | $0.0 \%$ |
| $65-$ | 16,719 | 73.7 | 2,153 | 377 | 14,380 | $0.0 \%$ |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |
| $0-6$ | 3,247 | 3.6 | 4,055 | 500 | 14,687 | $0.0 \%$ |
| $7-15$ | 5,762 | 10.9 | 2,533 | 210 | 6,890 | $0.1 \%$ |
| $16-39$ | 5,962 | 27.7 | 2,232 | 390 | 6,247 | $0.0 \%$ |
| $40-64$ | 9,559 | 54.5 | 2,278 | 535 | 6,598 | - |
| $65-$ | 7,495 | 73.4 | 2,172 | 468 | 14,380 | $0.0 \%$ |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 3,171 | 3.6 | 4,214 | 975 | 14,091 | - |  |
| $7-15$ | 5,708 | 11.0 | 2,514 | 322 | 6,879 | $0.1 \%$ |  |
| $16-39$ | 8,784 | 28.3 | 2,018 | 351 | 5,611 | $0.0 \%$ |  |
| $40-64$ | 14,084 | 53.7 | 2,021 | 350 | 35,322 | $0.0 \%$ |  |
| $65-$ | 9,224 | 73.8 | 2,137 | 377 | 10,009 | $0.0 \%$ |  |

FY 2012

| Lymphocyte (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 4,320 | 3.6 | 4,261 | 418 | 16,188 | $0.0 \%$ |  |
| $7-15$ | 7,429 | 10.9 | 2,575 | 199 | 8,981 | $0.0 \%$ |  |
| $16-39$ | 8,455 | 28.6 | 2,002 | 536 | 6,354 | - |  |
| $40-64$ | 19,473 | 55.0 | 2,023 | 367 | 13,909 | $0.0 \%$ |  |
| $65-$ | 18,547 | 73.5 | 2,003 | 332 | 41,569 | $0.0 \%$ |  |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 2,158 | 3.6 | 4,202 | 865 | 14,211 | - |  |
| $7-15$ | 3,806 | 10.8 | 2,582 | 199 | 8,981 | $0.0 \%$ |  |
| $16-39$ | 3,219 | 27.9 | 2,136 | 723 | 6,354 | - |  |
| $40-64$ | 7,687 | 55.4 | 2,138 | 367 | 5,568 | $0.0 \%$ |  |
| $65-$ | 8,435 | 73.4 | 2,013 | 396 | 11,115 | $0.0 \%$ |  |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | ---: | ---: | ---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 2,162 | 3.6 | 4,321 | 418 | 16,188 | $0.0 \%$ |  |
| $7-15$ | 3,623 | 10.9 | 2,569 | 418 | 8,526 | $0.0 \%$ |  |
| $16-39$ | 5,236 | 29.1 | 1,920 | 536 | 5,628 | - |  |
| $40-64$ | 11,786 | 54.7 | 1,949 | 396 | 13,909 | $0.1 \%$ |  |
| $65-$ | 10,112 | 73.6 | 1,994 | 332 | 41,569 | $0.0 \%$ |  |

## Differential white blood count (lymphocyte)

FY 2013

| Lymphocyte (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |  |
| $0-6$ | 3,777 | 3.7 | 4,330 | 945 | 15,912 | - |  |
| $7-15$ | 6,417 | 10.8 | 2,633 | 687 | 7,425 | - |  |
| $16-39$ | 6,526 | 29.0 | 2,020 | 371 | 5,396 | $0.0 \%$ |  |
| $40-64$ | 16,906 | 55.3 | 2,042 | 210 | 7,391 | $0.0 \%$ |  |
| $65-$ | 18,949 | 73.5 | 2,017 | 124 | 12,381 | $0.0 \%$ |  |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |
| $0-6$ | 1,941 | 3.7 | 4,304 | 954 | 15,912 | - |
| $7-15$ | 3,284 | 10.9 | 2,633 | 696 | 6,210 | - |
| $16-39$ | 2,476 | 28.3 | 2,122 | 371 | 5,375 | $0.1 \%$ |
| $40-64$ | 6,505 | 55.7 | 2,156 | 524 | 7,391 | - |
| $65-$ | 8,633 | 73.4 | 2,029 | 124 | 12,381 | $0.0 \%$ |


| Lymphocyte (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :--- |
| Age | Number of <br> examinees | Average <br> age | Average <br> lymphocyte <br> count | Minimum <br> value | Maximum <br> value | $500 / \mu \mathrm{L}$ <br> and below |
| $0-6$ | 1,836 | 3.7 | 4,357 | 945 | 13,244 | - |
| $7-15$ | 3,133 | 10.8 | 2,634 | 687 | 7,425 | - |
| $16-39$ | 4,050 | 29.5 | 1,958 | 452 | 5,396 | $0.0 \%$ |
| $40-64$ | 10,401 | 55.0 | 1,971 | 210 | 6,469 | $0.0 \%$ |
| $65-$ | 10,316 | 73.5 | 2,006 | 360 | 6,930 | $0.0 \%$ |

Average absolute lymphocyte counts derived from the differential white cell counts in FY 2011 were: $4,134 / \mu \mathrm{L}(4,055 / \mu \mathrm{L}$ for males and $4,214 / \mu \mathrm{L}$ for females) for age group $0-6 ; 2,524 / \mu \mathrm{L}$ $(2,533 / \mu \mathrm{L}$ for males and $2,514 / \mu \mathrm{L}$ for females) for age group $7-15 ; 2,105 / \mu \mathrm{L}(2,232 / \mu \mathrm{L}$ for males and $2,018 / \mu \mathrm{L}$ for females) for age group $16-39 ; 2,125 / \mu \mathrm{L}(2,278 / \mu \mathrm{L}$ for males and $2,021 / \mu \mathrm{L}$ for females) for age group $40-64$; and $2,153 / \mu \mathrm{L}(2,172 / \mu \mathrm{L}$ for males and $2,137 / \mu \mathrm{L}$ for females) for age group 65 and above.

There was no significant change in the average value among age groups throughout FY 2011-2013. Further, there was no increase in the prevalence of $500 / \mu \mathrm{L}$ and below.

## Differential white blood count (monocyte)

FY 2011

| Monocyte (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 6,418 | 3.6 | 440 | 0 | 1,936 |
| 7-15 | 11,470 | 11.0 | 355 | 0 | 1,380 |
| 16-39 | 14,746 | 28.1 | 338 | 0 | 1,150 |
| 40-64 | 23,643 | 54.0 | 319 | 0 | 1,558 |
| 65- | 16,719 | 73.7 | 330 | 0 | 1,369 |


| Monocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 3,247 | 3.6 | 454 | 0 | 1,683 |
| 7-15 | 5,762 | 10.9 | 366 | 0 | 1,380 |
| 16-39 | 5,962 | 27.7 | 361 | 0 | 1,150 |
| 40-64 | 9,559 | 54.5 | 363 | 0 | 1,558 |
| 65- | 7,495 | 73.4 | 366 | 19 | 1,369 |


| Monocyte (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 3,171 | 3.6 | 426 | 0 | 1,936 |
| 7-15 | 5,708 | 11.0 | 343 | 0 | 1,242 |
| 16-39 | 8,784 | 28.3 | 322 | 0 | 1,120 |
| 40-64 | 14,084 | 53.7 | 289 | 26 | 986 |
| 65- | 9,224 | 73.8 | 301 | 0 | 1,293 |

FY 2012

| Monocyte (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 4,320 | 3.6 | 445 | 0 | 2,580 |
| 7-15 | 7,429 | 10.9 | 350 | 0 | 1,455 |
| 16-39 | 8,455 | 28.6 | 329 | 0 | 1,017 |
| 40-64 | 19,473 | 55.0 | 317 | 0 | 1,729 |
| 65- | 18,547 | 73.5 | 332 | 38 | 3,913 |


| Monocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 2,158 | 3.6 | 460 | 0 | 2,580 |
| 7-15 | 3,806 | 10.8 | 362 | 39 | 1,455 |
| 16-39 | 3,219 | 27.9 | 353 | 43 | 1,017 |
| 40-64 | 7,687 | 55.4 | 362 | 0 | 1,161 |
| 65- | 8,435 | 73.4 | 368 | 44 | 3,913 |


| Monocyte (count/ $\mu \mathrm{L})($ female) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> monocyte <br> count | Minimum value | Maximum value |  |
| $0-6$ | 2,162 | 3.6 | 431 | 30 | 1,708 |  |
| $7-15$ | 3,623 | 10.9 | 337 | 0 | 1,372 |  |
| $16-39$ | 5,236 | 29.1 | 314 | 0 | 988 |  |
| $40-64$ | 11,786 | 54.7 | 289 | 29 | 1,729 |  |
| $65-$ | 10,112 | 73.6 | 303 | 38 | 3,128 |  |

Differential white blood count (monocyte)
FY 2013

| Monocyte (count/ $\mu \mathrm{L})$ (overall) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees |  |  |  |  |  |
| $0-6$ | 3,777 | Average <br> age | Average <br> monocyte <br> count | Minimum value | Maximum value |  |
| $7-15$ | 6,417 | 10.7 | 450 | 357 | 0 |  |


| Monocyte (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average monocyte count | Minimum value | Maximum value |
| 0-6 | 1,941 | 3.7 | 465 | 0 | 1,462 |
| 7-15 | 3,284 | 10.9 | 365 | 43 | 1,174 |
| 16-39 | 2,476 | 28.3 | 356 | 38 | 1,092 |
| 40-64 | 6,505 | 55.7 | 362 | 21 | 1,273 |
| $65-$ | 8,633 | 73.4 | 369 | 58 | 1,989 |


| Monocyte (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> monocyte <br> count | Minimum value | Maximum value |
| 0-6 | 1,836 | 3.7 | 435 | 0 | 1,611 |
| 7-15 | 3,133 | 10.8 | 349 | 0 | 1,180 |
| 16-39 | 4,050 | 29.5 | 317 | 42 | 997 |
| 40-64 | 10,401 | 55.0 | 290 | 55 | 1,258 |
| 65- | 10,316 | 73.5 | 304 | 79 | 1,827 |

Average absolute monocyte counts derived from the differential white cell counts in FY 2011 were: $440 / \mu \mathrm{L}$ $(454 / \mu \mathrm{L}$ for males and $426 / \mu \mathrm{L}$ for females) for age group $0-6 ; 355 / \mu \mathrm{L}(366 / \mu \mathrm{L}$ for males and $343 / \mu \mathrm{L}$ for females) for age group $7-15$; $338 / \mu \mathrm{L}(361 / \mu \mathrm{L}$ for males and $322 / \mu \mathrm{L}$ for females) for age group $16-39 ; 319 / \mu \mathrm{L}$ ( $363 / \mu \mathrm{L}$ for males and $289 / \mu \mathrm{L}$ for females) for age group $40-64 ; 330 / \mu \mathrm{L}(366 / \mu \mathrm{L}$ for males and $301 / \mu \mathrm{L}$ for females) for age group 65 and above.

There were no significant differences in the average value of all age groups throughout FY 2011-2013.

## Differential white blood count (eosinophil)

FY 2011

| Eosinophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average eosinophil count | Minimum value | Maximum value |
| 0-6 | 6,418 | 3.6 | 223 | 0 | 2,720 |
| 7-15 | 11,470 | 11.0 | 214 | 0 | 2,331 |
| 16-39 | 14,746 | 28.1 | 175 | 0 | 3,310 |
| 40-64 | 23,643 | 54.0 | 160 | 0 | 3,180 |
| 65- | 16,719 | 73.7 | 153 | 0 | 5,852 |


| Eosinophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average eosinophil count | Minimum value | Maximum value |
| 0-6 | 3,247 | 3.6 | 250 | 0 | 1,980 |
| 7-15 | 5,762 | 10.9 | 244 | 0 | 2,135 |
| 16-39 | 5,962 | 27.7 | 201 | 0 | 3,141 |
| 40-64 | 9,559 | 54.5 | 190 | 0 | 3,180 |
| 65- | 7,495 | 73.4 | 179 | 0 | 5,852 |


| Eosinophil |  |  |  |  |  |  | (count/ $\mu \mathrm{L})$ (female) |
| ---: | ---: | ---: | ---: | :--- | :--- | :---: | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |  |  |
| $0-6$ | 3,171 | 3.6 | 195 | 0 | 2,720 |  |  |
| $7-15$ | 5,708 | 11.0 | 185 | 0 | 2,331 |  |  |
| $16-39$ | 8,784 | 28.3 | 158 | 0 | 3,310 |  |  |
| $40-64$ | 14,084 | 53.7 | 139 | 0 | 2,353 |  |  |
| $65-$ | 9,224 | 73.8 | 133 | 0 | 3,110 |  |  |

FY 2012

| Eosinophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average eosinophil count | Minimum value | Maximum value |
| 0-6 | 4,320 | 3.6 | 288 | 0 | 2,317 |
| 7-15 | 7,429 | 10.9 | 266 | 0 | 2,402 |
| 16-39 | 8,455 | 28.6 | 180 | 0 | 3,457 |
| 40-64 | 19,473 | 55.0 | 158 | 0 | 3,438 |
| 65- | 18,547 | 73.5 | 150 | 0 | 6,024 |


| Age <br> Aumber of <br> examinees |  |  |  |  |  |  | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |
| ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | 2,158 | 3.6 | 316 | 0 | 2,183 |  |  |  |  |  |
| $7-15$ | 3,806 | 10.8 | 304 | 0 | 2,156 |  |  |  |  |  |
| $16-39$ | 3,219 | 27.9 | 210 | 0 | 1,610 |  |  |  |  |  |
| $40-64$ | 7,687 | 55.4 | 188 | 0 | 3,438 |  |  |  |  |  |
| $65-$ | 8,435 | 73.4 | 174 | 0 | 6,024 |  |  |  |  |  |


| Eosinophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |  |
| ---: | ---: | ---: | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |  |
| $0-6$ | 2,162 | 3.6 | 261 | 0 | 2,317 |  |
| $7-15$ | 3,623 | 10.9 | 226 | 0 | 2,402 |  |
| $16-39$ | 5,236 | 29.1 | 162 | 0 | 3,457 |  |
| $40-64$ | 11,786 | 54.7 | 139 | 0 | 3,394 |  |
| $65-$ | 10,112 | 73.6 | 131 | 0 | 1,808 |  |

## Differential white blood count (eosinophil)

FY 2013

| Eosinophil (count/ $\mu \mathrm{L})$ (overall) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |  |
| $0-6$ | 3,777 | 3.7 | 301 | 0 | 2,793 |  |
| $7-15$ | 6,417 | 10.8 | 275 | 0 | 3,737 |  |
| $16-39$ | 6,526 | 29.0 | 176 | 0 | 4,563 |  |
| $40-64$ | 16,906 | 55.3 | 160 | 0 | 4,717 |  |
| $65-$ | 18,949 | 73.5 | 153 | 0 | 17,225 |  |


| Eosinophil (count/ $\mu \mathrm{L})($ male) |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |  |
| $0-6$ | 1,941 | 3.7 | 333 | 0 | 2,793 |  |
| $7-15$ | 3,284 | 10.9 | 314 | 0 | 3,737 |  |
| $16-39$ | 2,476 | 28.3 | 206 | 0 | 4,563 |  |
| $40-64$ | 6,505 | 55.7 | 190 | 0 | 4,618 |  |
| $65-$ | 8,633 | 73.4 | 178 | 0 | 3,885 |  |


| Eosinophil (count/ $\mu \mathrm{L}$ (female) |  |  |  |  |  |  |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Age | Number of <br> examinees | Average <br> age | Average <br> eosinophil <br> count | Minimum value | Maximum value |  |
| $0-6$ | 1,836 | 3.7 | 267 | 0 | 2,121 |  |
| $7-15$ | 3,133 | 10.8 | 234 | 0 | 1,628 |  |
| $16-39$ | 4,050 | 29.5 | 158 | 0 | 1,168 |  |
| $40-64$ | 10,401 | 55.0 | 141 | 0 | 4,717 |  |
| $65-$ | 10,316 | 73.5 | 132 | 0 | 17,225 |  |

Average absolute eosinophil counts derived from the differential white cell counts in FY 2011 were: $223 / \mu \mathrm{L}(250 / \mu \mathrm{L}$ for males and $195 / \mu \mathrm{L}$ for females) for age group $0-6 ; 214 / \mu \mathrm{L}(244 / \mu \mathrm{L}$ for males and $185 / \mu \mathrm{L}$ for females) for age group $7-15 ; 175 / \mu \mathrm{L}(201 / \mu \mathrm{L}$ for males and $158 / \mu \mathrm{L}$ for females) for age group $16-39 ; 160 / \mu \mathrm{L}$ ( $190 / \mu \mathrm{L}$ for males $139 / \mu \mathrm{L}$ for females) for age group $40-64$;
$153 / \mu \mathrm{L}(179 / \mu \mathrm{L}$ for males and $133 / \mu \mathrm{L}$ for female) for age group 65 and above.
There were no significant changes in the average value for all age groups throughout FY 2011-2013.

## Differential white blood count (basophil)

FY 2011

| Basophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 6,418 | 3.6 | 36 | 0 | 378 |
| 7-15 | 11,470 | 11.0 | 31 | 0 | 703 |
| 16-39 | 14,746 | 28.1 | 30 | 0 | 390 |
| 40-64 | 23,643 | 54.0 | 30 | 0 | 463 |
| 65- | 16,719 | 73.7 | 28 | 0 | 1,286 |


| Basophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 3,247 | 3.6 | 38 | 0 | 378 |
| 7-15 | 5,762 | 10.9 | 33 | 0 | 703 |
| 16-39 | 5,962 | 27.7 | 31 | 0 | 390 |
| 40-64 | 9,559 | 54.5 | 32 | 0 | 463 |
| 65- | 7,495 | 73.4 | 29 | 0 | 1,286 |


| Basophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> basophil <br> count | Minimum value | Maximum value |
| 0-6 | 3,171 | 3.6 | 35 | 0 | 321 |
| 7-15 | 5,708 | 11.0 | 29 | 0 | 338 |
| 16-39 | 8,784 | 28.3 | 28 | 0 | 210 |
| 40-64 | 14,084 | 53.7 | 28 | 0 | 190 |
| 65- | 9,224 | 73.8 | 27 | 0 | 636 |

FY 2012

| Basophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 4,320 | 3.6 | 39 | 0 | 471 |
| 7-15 | 7,429 | 10.9 | 33 | 0 | 440 |
| 16-39 | 8,455 | 28.6 | 38 | 0 | 306 |
| 40-64 | 19,473 | 55.0 | 40 | 0 | 542 |
| 65- | 18,547 | 73.5 | 38 | 0 | 2,021 |


| Basophil (count/ $\mu \mathrm{L}$ ) (male) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average <br> basophil <br> count | Minimum value | Maximum value |
| 0-6 | 2,158 | 3.6 | 40 | 0 | 471 |
| 7-15 | 3,806 | 10.8 | 36 | 0 | 440 |
| 16-39 | 3,219 | 27.9 | 40 | 0 | 273 |
| 40-64 | 7,687 | 55.4 | 43 | 0 | 542 |
| 65- | 8,435 | 73.4 | 41 | 0 | 2,021 |


| Basophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 2,162 | 3.6 | 37 | 0 | 426 |
| 7-15 | 3,623 | 10.9 | 30 | 0 | 408 |
| 16-39 | 5,236 | 29.1 | 37 | 0 | 306 |
| 40-64 | 11,786 | 54.7 | 37 | 0 | 216 |
| 65- | 10,112 | 73.6 | 36 | 0 | 395 |

## Differential white blood count (basophil)

FY 2013

| Basophil (count/ $\mu \mathrm{L}$ ) (overall) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 3,777 | 3.7 | 38 | 0 | 1,120 |
| 7-15 | 6,417 | 10.8 | 34 | 0 | 798 |
| 16-39 | 6,526 | 29.0 | 40 | 0 | 258 |
| 40-64 | 16,906 | 55.3 | 41 | 0 | 345 |
| 65- | 18,949 | 73.5 | 39 | 0 | 683 |


| Basophil(count/ $\mu \mathrm{L})($ male) <br> Age <br> Number of <br> examinees |  |  |  |  |  |  | Average <br> age | Average <br> basophil <br> count | Minimum value | Maximum value |
| ---: | ---: | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $0-6$ | 1,941 | 3.7 | 40 | 0 | 1,120 |  |  |  |  |  |
| $7-15$ | 3,284 | 10.9 | 35 | 0 | 231 |  |  |  |  |  |
| $16-39$ | 2,476 | 28.3 | 42 | 0 | 192 |  |  |  |  |  |
| $40-64$ | 6,505 | 55.7 | 45 | 0 | 345 |  |  |  |  |  |
| $65-$ | 8,633 | 73.4 | 41 | 0 | 590 |  |  |  |  |  |


| Basophil (count/ $\mu \mathrm{L}$ ) (female) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Number of examinees | Average age | Average basophil count | Minimum value | Maximum value |
| 0-6 | 1,836 | 3.7 | 36 | 0 | 340 |
| 7-15 | 3,133 | 10.8 | 32 | 0 | 798 |
| 16-39 | 4,050 | 29.5 | 39 | 0 | 258 |
| 40-64 | 10,401 | 55.0 | 39 | 0 | 230 |
| 65- | 10,316 | 73.5 | 37 | 0 | 683 |

Average absolute basophil counts derived from the differential white cell counts in FY 2011 were: $36 / \mu \mathrm{L}$ ( $38 / \mu \mathrm{L}$ for males and $35 / \mu \mathrm{L}$ for females) for age group $0-6 ; 31 / \mu \mathrm{L}$ ( $33 / \mu \mathrm{L}$ for males and $29 / \mu \mathrm{L}$ for females) for age group $7-15 ; 30 / \mu \mathrm{L}(31 / \mu \mathrm{L}$ for males and $28 / \mu \mathrm{L}$ for females) for age group $16-39 ; 30 / \mu \mathrm{L}(32 / \mu \mathrm{L}$ for males and $28 / \mu \mathrm{L}$ for females) for age group $40-64$; and $28 / \mu \mathrm{L}(29 / \mu \mathrm{L}$ for males and $27 / \mu \mathrm{L}$ for females) for age group 65 and above.

There were no significant changes in the average value of all age groups throughout FY 2011-2013.

1) Since FY 2011 there has been an increase in the prevalence of males 70 kg and above and females 65 kg and above among 16 years old and above.
2) Overweight individuals with BMI $25 \mathrm{~kg} / \mathrm{m}^{2}$ and above were already $22.3 \%$ for age group $16-39$. This prevalence increased with age and was $37.1 \%$ for age group 65 and above. The prevalence of overweight males was higher compared to the females for all ages. There were almost no changes for this prevalence for age group 65 and above from FY 2011-2013.
3) The prevalence for individuals with visceral fat accumulation ( 85 cm and above for males and 90 cm and above for females) was about $55 \%$ for males 40 and above throughout FY 2011-2013. The prevalence was about $21 \%$ for females of age $40-64$, and about $27 \%$ for females of 65 years old and above, and the prevalence has not changed for the most part. The prevalence for individuals with visceral fat accumulation increased with age and there was more males compared to females among all age groups. Among males of age 16-39, there was lower prevalence of individuals with visceral fat accumulation in FY 2013 compared to FY 2011.
4) The prevalence of hypertensive individuals has decreased each year during the time period of FY 2011-2013 for all age groups and both genders. Among all age groups males had more hypertensive individuals compared to females.
5) The prevalence of individuals with urinary sugar positive of (1+) was $0.7 \%$ for age group 16-39 for FY 2011. This prevalence has increased with age and was $3.2 \%$ for age group 65 and above. Among all age groups, there were more males with ( $1+$ ) or more urinary sugar positive compared to women. The prevalence of individuals with urinary sugar positive for age group 40 and above has decreased each year.
6) The prevalence of individuals with urinary protein positive of ( $1+$ ) was $1.1 \%$ for age group 16-39 in FY 2011. This prevalence then doubled in FY 2012 to $2.2 \%$, and has also increased in FY 2013 to $2.4 \%$. There were no clear changes in frequency for age group 40 and above throughout FY 2011-2013.
7) The positive prevalence of individuals with (1+) urine occult blood (with the exception of during menstruation) for each age group in FY 2011 was $3.0 \%$ for age group 16-39; 5.6\% for age group 40-64; and $7.4 \%$ for age group 65 and above. The positive frequency of individuals with urine occult blood increased with age. This tendency was about the same compared to FY 2012 and FY 2013.
8) The average creatinine value of each age group showed about the same value for both genders from FY 2011-2013. This value had a tendency to increase with age. For all age groups and both genders, high value of creatinine $(1.35 \mathrm{mg} / \mathrm{dL}$ and above for males and 1.15 $\mathrm{mg} / \mathrm{dL}$ and above for females) that indicates a decrease in kidney function was less than $1 \%$ among individuals of 64 year olds and younger.
9) The average value of eGFR showed the same value for both genders throughout FY 2011-2013, and decreased with age. The prevalence of individuals with less than eGFR 60 $\mathrm{mL} / \mathrm{min} / 1.73 \mathrm{~m}^{2}$ indicating light decrease in kidney function in FY 2011 was: $0.2 \%$ for age group 16-39; 6.6\% for age group 40-64; and $28.6 \%$ for age group 65 and above, the highest prevalence among all groups. This prevalence was similar in FY 2012 and FY 2013.
10) The prevalence of individuals with impaired glucose tolerance with fasting plasma glucose of $110 \mathrm{mg} / \mathrm{dL}$ and above was $1.9 \%$ for age group $16-39$ in FY 2011. This prevalence increased with age and was $26.1 \%$ for age group 65 and above. The prevalence of individuals with impaired glucose tolerance was higher among females compared to males among all age groups. The prevalence of individuals with $130 \mathrm{mg} / \mathrm{dL}$ and above for age group 40 and above has decreased each year and there has been a sign of improvement in blood sugar management.
11) The prevalence of individuals with impaired glucose tolerance with levels of HbA1c $6.0 \%$ and above was $1.6 \%$ for age groups $16-39$ in FY 2011. This prevalence increased with ages and is $18.7 \%$ for age group 65 and above. There has been an increase among all ages each year. For all age groups, females had higher prevalence of individuals with impaired glucose tolerance compared to males. However, the prevalence of levels HbA1c $8.0 \%$ and above have decreased each year. There has been an increase in the number of individuals with impaired glucose tolerance, but there has been a sign of improvement in blood sugar management.
12) Lipid metabolism abnormality that includes High LDL cholesterol blood disease, hypertriglyceridemia, and low HDL cholesterol blood disease were respectively about $13 \%$, $7 \%$, and $3 \%$ for the age group $7-15$, and have increased with age. On the other hand, the prevalence has slightly decreased in FY 2012 for age group 65 and above.
13) Results above the reference inferral for AST, ALT, and $\gamma$-GT (i.e., $\geq 51 \mathrm{U} / \mathrm{L}$ ) were commonly found among males for age group 40-64. This prevalence has deteriorated from FY 2011 to FY 2012 for age group 40-64 that displayed higher frequencies, but this level returned to its initial level in FY 2013, indicating some improvement.
14) The prevalence of individuals with hyperuricemia with a uric acid level of $7.1 \mathrm{mg} / \mathrm{dL}$ and above for males was $4.7 \%$ for age group $7-15$ and $18.5 \%$ for age group 16-39. There were more males with hyperuricemia for all age groups compared to females and this prevalence has increased through FY 2011-2013.
15) Since FY 2011, there were no changes in the value of RBC, WBC or platelet count among children and adults.
16) Among the differential white blood count the actual average value of neutrophil, lymphocyte, monocyte, eosinophil and basophil did not display significant changes throughout FY 2011-2013 for each age group.

# The implementation status of the Mental Health and Lifestyle Survey 

Reported on 25 December 2014

## 1. FY 2013 Survey response and status of support (as of Oct $31^{\text {st }}$, 2014)

### 1.1 Response state

Number of responses and response rate

| Category | Number of <br> people | Number of <br> responses | Response <br> rate |
| :---: | ---: | ---: | ---: |
| Children | 26,513 | 9,495 | $35.8 \%$ |
| General | 185,859 | 46,386 | $25.0 \%$ |
| Total | 212,372 | 55,881 | $26.3 \%$ |

1.2 Response results (tentative)

Refer to the separate sheet " 2013 Mental Health and Lifestyle Survey' debrief report (tentative)."

### 1.3 Status of support

1.3-1 Support by phone calls

From the responses, we determine individuals who we assume require support, and clinical professionals such as clinical psychologists, public health nurses, and nurses call them to provide support in order to resolve issues regarding mental health and lifestyle habits.
A) Scale of support
$\left.\begin{array}{|c|r|r|r|r|r|r|}\hline \text { Category } & \begin{array}{c}\text { Number } \\ \text { of } \\ \text { people } \\ \text { in need } \\ \text { of } \\ \text { support }\end{array} & \begin{array}{c}\text { Required } \\ \text { support } \\ \text { rate }\end{array} & \begin{array}{c}\text { Number of } \\ \text { correspondence }\end{array} & \begin{array}{c}\text { Correspondence } \\ \text { rate }\end{array} & \begin{array}{c}\text { Number } \\ \text { of people } \\ \text { who } \\ \text { received }\end{array} & \begin{array}{c}\text { Support } \\ \text { completion } \\ \text { rate }\end{array} \\ \text { support }^{3}\end{array}\right]$

1) Number of people who require support

Children : Individuals who score 20 points or more on SDQ (regarding children's emotion and action).
General Public: Individuals who score 13 points or more on K6 (Overall mental status) and score 50 points or more on PCL (Trauma reaction), or those who score 17 points or more on K6 regardless of PCL score.
Number of people who require support: Those who were deemed to require support by Oct $31^{\text {st }}$.
2) Number of correspondences

Those to whom at least one phone call has been made (including unanswered phone calls) according to response content, and those who have not listed their phone number on the survey.
3) Number of supported people

Those for whom support has been completed. These also include people for whom support has been completed via written document (refer to "B. Written support").
B) Support by items other than scale

| Category | Number <br> of people <br> in need of <br> support $^{1}$ | Required <br> support rate | Number of <br> correspondences $^{2}$ | Correspon <br> dence rate | Number <br> of people <br> who <br> received $^{\text {support }^{3}}$ | Support <br> completion <br> rate |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Children | 39 | $0.4 \%$ | 39 | $100 \%$ | 37 | $94.9 \%$ |
| General | 820 | $1.8 \%$ | 820 | $100 \%$ | 722 | $88.0 \%$ |
| Total | 859 | $1.5 \%$ | 859 | $100 \%$ | 759 | $88.4 \%$ |

2) 3) Refer to A) above
1) Number of people who require support

Individuals that were determined to have higher level emergencies among those who require support based on the contents of free response and those shown on the margins of the survey.
Those who have conditions such as high blood pressure and diabetes who are not currently attending a hospital as an outpatient with a BMI level of 27.5 or above and have experienced a 3 kg or above body weight increase ("General public").
Those with conditions such as high blood pressure and diabetes who are currently not attending a hospital as an outpatient, while drinking 3 go (around half a liter) of alcohol daily ("General public").
Number of people who require support: Those who were determined to require support by Oct $31^{\text {st }}$.

## 1.3-2 Written support

As a consultation counter, we have sent a situation confirmation document with a post card enclosed for reply in order to confirm the current health status and the necessity of phone consultation as well as to provide information regarding the mental health and lifestyle habits survey hotline.
A) Support by scale: Support is provided to individuals whose SDQ, K6, and PCL values go above the reference values in previous studies (SDQ: 16, K6:13, PCL: 44) and who do not fall within those intended for phone support.

$\left.$| Category | Number of <br> people who <br> will receive a <br> situation <br> confirmation <br> document | Number <br> of <br> responses | Response <br> rate | Number <br> of people <br> who <br> require <br> phone <br> support |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | | Phone |
| :--- |
| support | | Support |
| :---: |
| completion |
| rate | \right\rvert\,

5) Number of people who require phone support

Those who request phone consultation and those that were determined to require phone support based on content written in space for correspondence.
B) Support for individuals who apply to the criteria below in terms of items other than the scale and who do not fall under those mentioned above who require support. Support criteria :

1. Individuals who have not consulted necessary medical institutions.
2. Individuals who are not satisfied with the quality of sleep, are less active and feel depressed during the day and have not received medical consultation.
3. Individuals with lower urgency levels among those who have been determined to require support based on free responses and contents included in the margin of page.

| Category | Number of <br> people who <br> will receive a <br> situation <br> confirmation <br> document | Number <br> of <br> responses | Response <br> rate | Number <br> of poople <br> who <br> require <br> pone <br> support | Number <br> of <br> support <br> cases | Support <br> completion <br> rate |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Children | 108 | 45 | $41.7 \%$ | 9 | 9 | $100 \%$ |
| General | 2,433 | 1,024 | $42.1 \%$ | 133 | 121 | $91.0 \%$ |
| Total | 2,541 | 1,069 | $42.1 \%$ | 142 | 130 | $91.5 \%$ |

5) Refer to A) above

## 1.3-3 Support provided in coordination with municipalities

Situations of individuals who were determined to require continuous support are shared with municipalities. For continuous support, municipalities coordinate with the Fukushima Kokoro no Care Center (Fukushima Mental Health Care Center) as necessary based on the judgment of each municipality.
Number of cases handed over to municipalities: 61

## 1.3-4 Other support

We also provide consultation to individuals who directly call the mental health and lifestyle habits survey hotline.
Support provided upon request: 25

### 1.4 Future policies regarding support

Among individuals that are subject to telephone support and written support, those who were not able to receive phone support will instead receive an information pamphlet.
For CAGE (question items regarding alcohol intake), a pamphlet regarding alcohol intake will be sent to individuals who correspond to 2 items or more but do not meet the criteria mentioned above for requiring support.

## 2. The results of interview survey (general public) FY 2013

In succession of FY 2012, in order to establish a support structure to provide support regarding mental health and lifestyle habits, we have conducted an interview survey among 38 people who have responded to the FY 2012 survey and 13 people who have been examined at psychiatric organizations.
As a result, the validity of PCL points ( 50 points and above) that are part of the current phone support criteria has been confirmed. In addition, the points that require attention for phone support were clarified based on comprehensive judgment.

## 3. The implementation plan for the FY 2014 survey

3.1 The approach for the FY 2014 survey

During the three-year period from FY 2011 to FY 2013, we have conducted a detailed factual investigation regarding the mental health and lifestyle habits of residents.
For the FY 2014 survey, we eliminated half of the original question items for the aim of improving the response rate by lightening the burden of respondents, and also in order to narrow down question items to those directly connected to care. Furthermore, in order to reflect the feedbacks from the actual support operations, we have added the most requested question items from 13 municipalities.

### 3.2 Objective

Based on the survey results from FY 2011 to FY 2013, we shall continue to monitor the transition of mental health and lifestyle habits and provide support.
Furthermore, as mentioned above, we shall provide more effective care to residents by narrowing items down to those directly related to support.
3.3 Questionnaire survey
3.3-1 Group: Residents (around 210 thousand people) of the evacuation area (as of the time of mailing of the FY 2011 questionnaire survey)
3.3-2 Methods: Questionnaire surveys (self-administering or response by guardian) were distributed by postal mail.

## 3.3-3 Categories

| Category | Targets | Response format |
| :---: | :---: | :---: |
| General public | Those born before April 1 ${ }^{\text {st }} 1999$ | self-administering |
| Middle school students | Those born between April $2^{\text {nd }} 1999$ and April $1^{\text {st }} 2002$ | Response by guardian (partially self-administering) |
| Elementary <br> school <br> students | Those born between April 2 ${ }^{\text {nd }} 2002$ and April $1^{\text {st }} 2008$ | Response by guardian |
| Ages 4-6 | Those born between April $2^{\text {nd }} 2008$ and April $1^{\text {st }} 2011$ | Response by guardian |
| Ages 0-3 | Those born between April $2^{\text {nd }} 2011$ and April $1^{\text {st }} 2014$ | Response by guardian |

## 3.3-4 Main survey items

- The current mental and physical health status
- Lifestyle habits (Diet, sleep, smoking, exercise, etc.)
- Recent behavior
- Current living situation, human relations ("general public")
3.3-5 Mailing period: To be mailed out sequentially starting from the end of January 2015


## 3.3-6 Correspondence after the survey

- Doctors from the Medical University will evaluate and analyze the response contents. Those who were deemed to require consultation and support based on their mental health and lifestyle habits will receive phone support by a mental health support team composed of professionals such as clinical psychiatrists, nurses and public health nurses.
- Those determined to require an examination by a doctor based on services such as phone consultation, will be introduced to "Registered doctors ( $\because$ Refer to the next item "4 Registered doctors") of a medical institution within the prefecture. Furthermore, if continuous support is required, we shall consider and provide the
required support in coordination with the municipalities in the evacuation areas. In this regard, if the individual is determined to require mental care visits, we shall provide further support in coordination with Fukushima Kokoro no Care Center.
- If an individual is determined to require further mental health care by a specialist based on the judgment of a registered doctor, the Medical University will take action (regular medical practice). Specifically, children will receive support from the Kodomo no Kokoro Shinryo Center (Children's mental consultation center), while adults will receive support from the psychosomatic department.
- We shall provide support by a radiation health consultation team composed of instructors from the Medical University in cases where the mental health support team receives consultations regarding radiation and it is determined that support from applicable medical specialists are required. Furthermore, among the health consultations caused by the effect of radiation, if direct examination is required, we shall consider providing support by medical specialists.


### 3.4 Questionnaire survey sheet (draft) (Refer to separate document)

### 3.5 Schedule

|  <br> Implementation items |  | 2014 | 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Oct-Dec | Jan | Feb | Mar |
| Questionnaire survey | Prining and sending out guestionaires |  |  |  |  |
|  | Collecting and inputting data of questionnaires |  |  |  |  |
| Consultation/support |  |  |  |  |  |

## 4. Registered doctor

### 4.1 Definition

A doctor who is assigned in cases where an individual is determined to require examination by medical specialists such as psychiatrists and pediatricians based on results of the survey regarding mental health and lifestyle habits.
4.2 Requirements for registration

Must have followed lecture courses hosted or accredited by the Medical University.
4.3 Number of registered doctors (as of Oct $31^{\text {st }} 2014$ )

143 doctors (from 83 medical institutions)

【Reference documents】Regarding the distribution of reference points in the FY 2013 survey

| Children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Items [Reference points] | Distribution in previous research | Definitive value for the 2011 survey <br> As of Oct $31^{\text {st }}$ 2012 <br> Number of valid responses $(14,209)$ | Definitive value for the 2012 survey As of Oct $31^{\text {st }}$ 2013 <br> Number of valid responses $(8,988)$ | Tentative value for the 2013 survey As of Oct $31^{\text {st }}$ 2014 <br> Number of valid responses ${ }^{4}$ $(7,784)$ |
| $\quad \mathrm{SDQ}$ (children's emotions and behavior) $[16$ points or more] | $9.5 \%{ }^{1}$ | 21.2\% | 15.4\% | $14.2 \%{ }^{4}$ |

General public

| Items [Reference points] | Distribution in previous research | $\begin{aligned} & \text { Definitive values } \\ & \text { for the } 2011 \\ & \text { survey } \\ & \text { As of Oct } 31^{\text {st }} \\ & 2012 \\ & \text { Number of valid } \\ & \text { responses } \\ & \text { (K6 : } 59,807 \text { ) } \\ & \text { (PCL : 60,704) } \end{aligned}$ | Definitive values for the 2012 survey <br> As of Oct $31^{\text {st }}$ 2013 <br> Number of valid responses <br> (K6: 45,229) <br> (PCL: 43,743) | Tentative values for the 2013 survey As of Oct $31^{\text {st }} 2014$ Number of valid responses ${ }^{4}$ (K6: 38,069) <br> (PCL: 38,161) |
| :---: | :---: | :---: | :---: | :---: |
| K6 <br> (Generic assessment of mental health) <br> [13 points or more] | $3.0 \%{ }^{2}$ | 14.6\% | 11.7\% | $9.7 \%{ }^{4}$ |
| PCL <br> (trauma reactions) [44 points or more] | $20.1 \%^{3}$ | 21.6\% | 17.4\% | $15.9 \%{ }^{4}$ |

1) Children of ages 4-12 in regional communities of Japan

Matsuishi T, et al. (2008) Scale properties of the Japanese version of the Strengths and Difficulties Questionnaire (SDQ): a study of infant and school children in community samples. Brain \& Development. 30: 410-415.
2) Local residents in Japan

Kawakami N, distribution and related factors of mental health conditions based on the nationwide K6 questionnaire survey.
The 2006 Health Labour Sciences Research Grant (Research on Applied Use of Statistics and Information). Research on the consideration of a system that understands and analyzes statistical information regarding the health condition of citizens from a household perspective. Divided research document
3) Frequency among rescue, recovery and cleanup workers after the 2001 World Trade Center Terrorist Attack in New York City, the United States.
Stellman JM, et al. (2008) Enduring mental health morbidity and social function impairment in World Trade Center rescue, recovery, and cleanup workers: the psychological dimension of an environmental health disaster. Environmental Health Perspectives. 116(9): 1248-1253.
4) Since these are tentative values, they may differ from definitive values that will be reported later.

## Overview of the tentative results of the FY 2013 Mental Health and Lifestyle Survey

## 1. Objective

Since the Great East Japan Earthquake and the Fukushima Daiichi nuclear disaster that occurred on March $11^{\text {th }}$ 2011, a Mental Health and Lifestyle Survey for prefectural inhabitants has been conducted from 2011 in order to understand the effects of mental pain and trauma caused by frightening experiences including fear of radiation, living in evacuation centers, and loss of property, and to provide support through appropriate medical care.

For mental health care, middle/long-term countermeasures are required. In order to accomplish this, we must communicate to those that we continue to monitor and support their mental and physical health. Thus, we have again conducted the survey by questionnaires as it is necessary to understand the changes and factors in the mental and physical condition of residents and provide appropriate support.

## 2. Methods

## 1) Population

Those of the FY 2013 survey include residents in areas such as the evacuation zones designated by the government as of March $11^{\text {th }} 2011$ and those born in those areas before April $1^{\text {st }}$ 2013. Specifically, this survey was for 212,372 citizens who are registered as residents in the following municipalities: Hirono town, Naraha town, Tomioka town, Kawauchi village, Okuma town, Futaba town, Namie town, Katsurao village, Iitate village, Minami Soma city, Tamura city, Kawamata town and parts of Date city (areas related to specified locations recommended for evacuation).

Ages 0-3 version:Individuals born from April 2 ${ }^{\text {nd }} 2010$ to April 1 2013 4,164
Ages 4-6 version:Individuals born from April 2 ${ }^{\text {nd }} 2007$ to April $1^{\text {st }} 2010 \quad 5,169$
Elementary school version :Individuals born from April $2^{\text {nd }} 2001$ to April ${ }^{\text {st }} 2007$ 11,167
Middle school version :Individuals born from April 2 ${ }^{\text {nd }} 1998$ to April $1^{\text {st }} 2001$ 6,013
General public version :Individuals born before April 1 ${ }^{\text {st }} 1998 \quad 185,859$

## 2) Methods

We divided the population as shown above and mailed the questionnaire (self-administered or filled out by a guardian).

## 3) Data collection period

The participants were required to respond during the period of Feb $5^{\text {th }} 2014$ to $\mathrm{Feb} 28^{\text {th }}$ 2014. The number of surveys entered into the system by July $9^{\text {th }} 2014$ was 34,793 .

## 4) Number of valid responses

For the tentative version, the numbers of valid responses subject to the collection (valid response rate) were the following: 1,281 individuals ( $30.8 \%$ ) for the ages $0-3$ version;

1,565 individuals ( $30.3 \%$ ) for the ages $4-6$ version; 3,001 individuals ( $26.9 \%$ ) for the elementary school version; 1,348 individuals ( $22.4 \%$ ) for the middle school version; and 27,598 individuals ( $14.8 \%$ ) for the general public version.

The results were collected for each item by questionnaire. The survey results are indicated in the report. As there are missing values in each item, the total may not match the abovementioned valid responses. Moreover, since the ratios (\%) in the report have been rounded to the nearest whole number, there are instances where the total does not add up to $100 \%$. Since figures of this collection indicated in this paper are tentative, they may differ from the ones that will be reported in the definitive version.

## 3. Summary of Tentative Values in the Collection of the FY 2013 Survey

For the survey regarding children's emotions and behavior (SDQ), elementary school children and children aged $4-6$ had higher ratios of those who have more than the reference point (16 points or more) compared to those in middle school. Among all ages, boys/males (ages 4-6: 16.1\%, elementary school: $16.1 \%$, and middle school $15.8 \%$ ) tend to have higher ratios of those who have more than the reference point compared to girls/females (ages 4-6: 12.6\%, elementary school: $12.5 \%$, and middle school: 11.0\%).
For the overall mental health condition (K6) and trauma reaction (PCL), those with percentages higher than the reference point (K6:13 points or more, PCL:44 points or more) were the lowest among those aged 10-19, and the highest among those aged 70 and more (K6: Ages 10-19 4.4\%, ages 70 and above 11.5\%, PCL: ages 10-19 3.8\%, ages 70 and above 24.7\%). Furthermore, females (K6: 11.5\%, PCL: 18.2\%) had a higher tendency to display percentages above reference point compared to males (K6:8.9\%, PCL: 15.9\%).

As for sleeping hours, the average values for ages $0-3,4-6$, elementary school students, middle school students and the general public was $10 \mathrm{~h} 0 \mathrm{~min}, 9 \mathrm{~h} 46 \mathrm{~min}$, $8 \mathrm{~h} 55 \mathrm{~min}, 7 \mathrm{~h}$ $11 \mathrm{~min}, 7 \mathrm{~h} 2 \mathrm{~min}$, respectively. As the age group increased, there was a tendency for the sleeping hours to become shorter.

As for exercise, the percentage of those who "almost never exercise (excluding exercises in physical education class for elementary and middle school children)" was $10.4 \%$ for ages $2-3,14.6 \%$ for ages $4-6,40.4 \%$ for elementary school children, $31.9 \%$ for middle school children, and $44.8 \%$ for the general public. Although these cannot be compared unconditionally, there was a higher tendency for elementary school students and the general public to respond that they "almost never exercise".
(Note) The question about exercise habits was for individuals over 2 years old.

# FY 2013 Fukushima Health Management Survey 

Mental Health and Lifestyle Survey

Result Report

(Tentative)

# Fukushima Medical University <br> Radiation Medical Science Center 

(December 2014)
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# FY 2013 Fukushima Health Management Survey 

## Mental Health and Lifestyle Survey <br> Collected results by questionnaire type

(Tentative)

## The result summary of the FY 2013 Mental Health and Lifestyle Survey

## 1. Objective

Ever since the Great East Japan Earthquake and Fukushima Daiichi nuclear disaster of March 11 in 2011, we have conducted the Fukushima Health Management Survey, Mental Health and Lifestyle Survey from 2011 and have been providing support in order to understand the mental health and lifestyle habits and provide appropriate care to citizens who endured mental pain and trauma from terrifying experiences such as concerns regarding radiation, evacuation life and loss of property.

For mental health care, middle to long-term countermeasures are required. In order to accomplish this, we must convey that we will continue to monitor and support their mental and physical health. In order to understand the changes and factors of their mental and physical health and provide appropriate support according to the situation, this study conducted another questionnaire survey this year.

## 2. Method

## 1) Population

Those in the FY 2013 survey are individuals who were born by Apr 1 ${ }^{\text {st }} 2013$ and reside in nationally designated evacuation areas at the time of Mar 11 2011. Specifically, these include 212,372 registered citizens of the following municipalities: Hirono town, Naraha town, Tomioka town, Kawauchi village, Okuma town, Futaba town, Namie town, Katsurao village, Iitate village, Minamisoma city, Tamura city and Kawamata town and parts of Date city (designated areas for recommended evacuation).
For age group 0-3:
Individuals born during the time period from Apr 2 ${ }^{\text {nd }} 2010$ to April $1^{\text {st }} 2013$
For age group 4-6:
Individuals born during the time period from Apr $2^{\text {nd }} 2007$ to April $1^{\text {st }} 2010$
For elementary school students:
Individuals born during the time period from Apr 2 ${ }^{\text {nd }} 2001$ to April $1^{\text {st }} 2007$
For middle school students:
Individuals born during the time period from Apr $2^{\text {nd }} 1998$ to April $1^{\text {st }} 2001$
For the general public:Individuals born before Apr $1^{\text {st }} 1998$

## 2) Method

We sent questionnaires (answered by self or by guardian) based on the target categories listed above.

## 3) Period of totalization

Participants had to answer the questionnaire during the time period from Feb $5^{\text {th }} 2014-\mathrm{Feb} 18^{\text {th }}$ 2013. 34,793 data entries were made by Jul $9^{\text {th }} 2013$.

## 4) Number of valid responses

Valid number of responses (valid response rate) that were collected for the tentative version of the questionnaire was: $1,281(30.8 \%)$ for age group $0-3 ; 1,565(30.3 \%)$ for age group 4-6; 3,001 (26.9\%) for elementary school students; 1,348 (22.4\%) for middle school students; and 27,598 (14.8\%) for the general public.

The results for each item were collected by questionnaire type. The collected results are shown below in the result report. Further, since there are missing values for each item, the total may not match the above mentioned number of valid responses. Further, the total may not add up to $100 \%$ since the ratios of the report have been rounded to whole numbers. Since the collected values are tentative, it is possible that the final version may contain different values.

## Results of the FY 2013 Mental Health and Lifestyle Survey (0-3)

Among 4,164 people (age group 0-3) in the survey regarding mental health and lifestyle habits, the valid response count was 1,281 ( $30.8 \%$ ). The breakdown was 654 ( $51.1 \%$ ) males and 627 ( $48.9 \%$ ) females and the average age was 2.0 years old.

As for the current address, 910 (71.1\%) lived within the prefecture and 369 (28.9\%) outside the prefecture.

## 1. The health condition of the child (Q1)

The ratios for the health condition were: 415 (33.1\%) for 'Very good'; 533 (42.5\%) for 'good'; $292(23.3 \%)$ for 'normal'; $14(1.1 \%)$ for 'bad'; and $0(0.0 \%)$ for 'very bad'.

## 2. The current height and weight of the child (Q2)

The average height/weight of boys were: $78.1 \mathrm{~cm} / 11.0 \mathrm{~kg}$ for 1 year olds; $88.2 \mathrm{~cm} / 12.7 \mathrm{~kg}$ for 2 year olds; and $95.8 \mathrm{~cm} / 15.0 \mathrm{~kg}$ for 3 year olds. The average height/weight of girls were:
$77.8 \mathrm{~cm} / 11.0 \mathrm{~kg}$ for 1 year olds; $86.4 \mathrm{~cm} / 12.6 \mathrm{~kg}$ for 2 year olds; and $94.4 \mathrm{~cm} / 14.2 \mathrm{~kg}$ for 3 year olds.

## 3. Currently treated diseases (Q3)

For currently treated diseases, 917 (74.1\%) answered 'no' while 321 (25.9\%) answered 'yes'.
The breakdown (multiple answers possible) of diseases for those who answered 'yes' are shown in Table 1 below.

Table 1 The breakdown of currently treated diseases

| Disease | Count |
| :--- | ---: |
| Common cold | 134 |
| Atopic dermatitis | 54 |
| Asthma | 35 |
| Otitis media | 35 |
| Odontopathy | 31 |
| Allergic rhinitis | 21 |
| Asthma, atopic dermatitis, allergies, <br> allergic conditions other than nasal <br> inflammation | 16 |
| Influenza | 11 |
| Sinusitis/ empyema | 6 |
| Epilepsy | 2 |
| ADHD | 2 |
| Other | 44 |

(Multiple answers)

## 4. Experience of hospitalization (Q4)

For experience of hospitalization, 982 (77.2\%) answered 'no' while 290 ( $2.8 \%$ ) answered 'yes'.
The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 2.

Among those who responded 'yes' to experience of hospitalization, 176 answered that they did not become hospitalized due to a disease within the year (responded 'none'). The breakdown of diseases for those who were hospitalized within the year is shown below in Table 3.

Table 2 Breakdown of diseases during hospitalization, Table 3 Breakdown of diseases during hospitalization within the past 1 year

| Disease | Count |
| :--- | ---: |
| Respiratory syncytial virus infection | 79 |
| Pneumonia | 43 |
| Bronchitis | 32 |
| Common cold | 28 |
| Gastroenteritis | 27 |
| Asthma | 24 |
| Rotavirus infection | 23 |
| Febrile convulsion | 22 |
| Mycoplasma pneumonia | 20 |
| Inguinal hernia | 10 |
| Kawasaki disease | 9 |
| Influenza | 8 |
| Other | 82 |

(Multiple answers)

| Disease | Count |
| :--- | ---: |
| Respiratory syncytial virus infection | 24 |
| Pneumonia | 16 |
| Asthma | 11 |
| Bronchitis | 9 |
| Rotavirus infection | 9 |
| Common cold | 8 |
| Febrile convulsion | 8 |
| Gastroenteritis | 6 |
| Inguinal hernia | 4 |
| Mycoplasma pneumonia | 3 |
| Influenza | 2 |
| Kawasaki disease | 1 |
| Other | 20 |

(Multiple answers)

## 5. Medical exam experience (Q5)

1) Those who answered 'no' for experience of CT scans were 1,192 ( $93.3 \%$ ), 'yes' were 54 (4.2\%) and 'I don't know’ were 31 ( $2.4 \%$ ).
2) Those who answered 'no' for experience of examinations using X-rays (except CT and X-ray examination) were 1,168 (92.8\%), 'yes' were 50 ( $4.0 \%$ ) and 'I don't know' were 40 (3.2\%).

Among those who answered 'yes', 38 had a fluoroscopy, 7 had an angiography, and 2 had a nuclear medicine scan.

## 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 1,251 (97.8\%), 'yes' were 11 ( $0.9 \%$ ), and 'I don't know' were 17 (1.3\%).

## 7. Sleeping hours and naps (Q7)

1) The average going-to-bed time was $9: 11 \mathrm{PM}$ and the average waking time was $7: 14 \mathrm{AM}$. The average sleeping time was 10 hours.
2) For naps (does your child take naps?), those who answered 'no' were 181 (14.2\%) and 'yes' were $1,091(85.8 \%)$. The average nap time was 1 hour and 52 minutes.

## 8. Regular amount of exercise (Q8)

For exercise (what is your regular amount of exercise? (age group 2 and above during the time of questionnaire)) : those who answered 'almost every day’ were 370 ( $43.4 \%$ ); ' $2-4$ times a week' were 283 ( $33.2 \%$ ); ‘once a week' were 110 ( $12.9 \%$ ); and 'barely exercise' were 89 ( $10.4 \%$ ).

## 9. Diet (Q9)

1) For breast milk (does your child drink breast milk?), those who answered 'yes' were 193 (15.7\%) and 'no' were 1,036 (84.3\%).
2) The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food (among those who were 1 year old and above at the time of questionnaire) were as shown in Table 4 (next page).

## 10. Child rearing (Q10)

For child rearing (do you ever lose confidence in child rearing?), those who answered 'yes' were 161 ( $12.6 \%$ ), 'no' were 566 (44.3\%), and 'cannot say' were 551 (43.1\%).

Table 4 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among the age group 1-3.
(Upper row is the number of individuals/lower row is percentage)

|  | I don't <br> eat | $\begin{gathered} \hline \text { Less } \\ \text { than } \\ \text { once a } \\ \text { week } \end{gathered}$ | $\begin{gathered} 1-2 \\ \text { times a } \\ \text { week } \end{gathered}$ | 3-4 <br> times a week | 5-6 times a week | Everyday | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Breakfast | $\begin{array}{r} 10 \\ (0.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ (0.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (1.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (3.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,138 \\ (94.5 \%) \\ \hline \end{array}$ | 1,204 |
| Eating out (excluding school lunch) | $\begin{array}{r} 124 \\ (10.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 688 \\ (57.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 319 \\ (26.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (2.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 35 \\ (2.9 \%) \\ \hline \end{array}$ | 1,194 |
| Pre-cooked foods | $\begin{array}{r} 112 \\ (9.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 468 \\ (39.1 \%) \end{array}$ | $\begin{array}{r} 445 \\ (37.2 \%) \end{array}$ | $\begin{array}{r} 139 \\ (11.6 \%) \end{array}$ | $\begin{array}{r} 22 \\ (1.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (0.9 \%) \\ \hline \end{array}$ | 1,197 |


| Cooked rice | 1 | 0 | 6 | 31 | 97 | 1,071 | 1,206 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $(0.1 \%)$ | $(0.0 \%)$ | $(0.5 \%)$ | $(2.6 \%)$ | $(8.0 \%)$ | $(88.8 \%)$ |  |
| Bread |  | 26 | 169 | 408 | 260 | 133 | 203 |
|  |  | $(2.2 \%)$ | $(14.1 \%)$ | $(34.0 \%)$ | $(21.7 \%)$ | $(11.1 \%)$ | $(16.9 \%)$ |$]$



Since there are missing values for each item, totals may not match.

## For age group $0-3$

## Results of the FY 2013 Mental Health and Lifestyle Survey (Age group 4-6)

Among the 5,169 people for the survey regarding mental health and lifestyle habits (age group $4-6)$, there were $1,565(30.3 \%)$ valid responses. The breakdown was 779 ( $49.8 \%$ ) boys and 786 (50.2\%) girls with an average age of 4.8 years old.

As for the current address, 1,053 (67.5\%) lived within the prefecture and 507 (32.5\%) lived outside the prefecture.

## 1. The health condition of the child (Q1)

The ratios for the health condition were: 404 (26.4\%) for 'Very good'; 651 (42.5\%)) for 'good'; 458 (29.9\%) for 'normal'; 16 (1.0\%) for 'bad'; and 3 ( $0.2 \%$ ) for very bad.

## 2. The current height and weight of the child (Q2)

The average height/weight of boys was: $102.7 \mathrm{~cm} / 16.8 \mathrm{~kg}$ for 4 year olds (as of Apr $1^{\text {st }} 2014$ ), $109.2 \mathrm{~cm} / 18.7 \mathrm{~kg}$ for 5 year olds and $115.7 \mathrm{~cm} / 21.4 \mathrm{~kg}$ for 6 year olds. The average height/weight for girls were: $101.9 \mathrm{~cm} / 16.3 \mathrm{~kg}$ for 4 year olds, $108.5 \mathrm{~cm} / 18.4 \mathrm{~kg}$ for 5 year olds, and $114.6 \mathrm{~cm} / 20.8 \mathrm{~kg}$ for 6 year olds.

## 3. Currently treated diseases (Q3)

For currently treated diseases, 978 (64.8\%) answered 'no' while 531 (35.2\%) answered 'yes'. The breakdown of diseases for individuals who answered 'yes' are shown in Table 5.

Table 5 The breakdown of currently treated diseases

| Disease | Count |
| :--- | ---: |
| Common cold | 155 |
| Atopic dermatitis | 107 |
| Odontopathy | 98 |
| Allergic rhinitis | 96 |
| Atopic dermatitis | 80 |
| Otitis media | 47 |
| Sinusitis/ empyema | 32 |
| Asthma, atopic dermatitis, allergies, <br> allergic conditions other than nasal <br> inflammation | 24 |
| Influenza | 23 |
| Epilepsy | 9 |
| ADHD | 3 |
| Other | 65 |

(Multiple answers)

## 4. Experience of hospitalization (Q4)

For experience of hospitalization, 1,103 (71.3\%) answered 'no' while 443 (28.7\%) answered 'yes'.

The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 6.
Among those who responded 'yes' to experience of hospitalization, 359 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 7.

Table 6 Breakdown of diseases during hospitalization, Table 7 Breakdown of diseases during hospitalization within the past year

| Disease | Count |
| :--- | ---: |
| Pneumonia | 127 |
| Respiratory syncytial virus infection | 89 |
| Mycoplasma pneumonia | 80 |
| Bronchitis | 54 |
| Asthma | 53 |
| Gastroenteritis | 46 |
| Rotavirus infection | 43 |
| Febrile convulsion | 41 |
| Common cold | 30 |
| Influenza | 26 |
| Inguinal hernia | 23 |
| Kawasaki disease | 15 |
| Other | 83 |

(Multiple answers)

| Disease | Count |
| :--- | ---: |
| Pneumonia | 15 |
| Mycoplasma pneumonia | 9 |
| Febrile convulsion | 8 |
| Inguinal hernia | 8 |
| Asthma | 6 |
| Bronchitis | 6 |
| Common cold | 5 |
| Gastroenteritis | 5 |
| Respiratory syncytial virus infection | 4 |
| Rotavirus infection | 4 |
| Kawasaki disease | 4 |
| Influenza | 3 |
| Other | 19 |

(Multiple answers)

## 5. Medical exam experience (Q5)

1) Those who answered 'no' for experience of CT scans were 1,411 (90.8\%), 'yes' were 96 (6.2\%) and 'I don't know' were 47 (3.0\%).
2) Those who answered 'no' for experience of examinations using X-rays (excluding CT and X-ray examination) were 1,406 ( $91.3 \%$ ), 'yes' were 84 (5.5\%) and 'I don't know' were 50 (3.2\%).

Among those that answered 'yes', 65 had a fluoroscopy, 9 had an angiography, and 2 had a nuclear medicine scan.

## 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 1,509 (97.2\%), 'yes' were 14 ( $0.9 \%$ ) and 'I don't know' were 30 ( $1.9 \%$ ).

## 7. Sleeping hours and naps (Q7)

1) The average going-to-bed time was $9: 10 \mathrm{PM}$ and the average waking time was 7:02 AM. The average sleeping time was 9 hours and 46 minutes.
2) For naps (does your child take naps?), those who answered 'no' were 1,002 (64.9\%), and 'yes' were 543 ( $35.1 \%$ ). The average nap time was 1 hour and 39 minutes.

## 8. Regular amount of exercise (Q8)

For exercise (what is your regular amount of exercise?), those who answered 'almost every day' were 612 ( $41.3 \%$ ), ' $2-4$ times a week' were 465 ( $31.4 \%$ ), 'once a week' were 189 ( $12.7 \%$ ), and 'barely exercise' were 217 (14.6\%).

## 9. Diet (Q9)

3) The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 8 (next page).

Table 8 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among age group 4-6
(Upper row is the number of individuals/lower row is ratio)

|  | I don't <br> eat | Less <br> than <br> once a <br> week | $1-2$ <br> times a <br> week | $3-4$ <br> times a <br> week | $5-6$ <br> times a <br> week | Everyday | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Breakfast | 5 <br> $(0.3 \%)$ | 0 <br> $(0.0 \%)$ | 14 <br> $(0.9 \%)$ | 39 <br> $(2.5 \%)$ | 67 <br> $(4.3 \%)$ | 1,437 <br> $(92.0 \%)$ | 1,562 |
| Eating out <br> (excluding school lunch) | 105 | 1,003 | 394 | 11 | 0 | 40 | 1,553 |
| (6.8\%) | $(64.6 \%)$ | $(25.4 \%)$ | $(0.7 \%)$ | $(0.0 \%)$ | $(2.6 \%)$ |  |  |
| Pre-cooked foods | 114 <br> $(7.4 \%)$ | 619 <br> $(40.0 \%)$ | 634 <br> $(41.0 \%)$ | 146 <br> $(9.4 \%)$ | 24 <br> $(1.6 \%)$ | 9 <br> $(0.6 \%)$ | 1,546 |


| Cooked rice |  |  |  |  |  |  | 1,340 | 1,560 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (0.0\%) | (0.2\%) | (0.2\%) | (3.9\%) | (9.8\%) | (85.9\%) |  |
| Bread |  |  |  |  |  |  |  | 1,559 |
|  |  | (0.8\%) | (15.8\%) | (36.4\%) | (22.6\%) | (9.6\%) | (14.9\%) |  |
| Fish dishes |  | 11 | 143 | 809 | 482 | 71 | 34 | 1,550 |
|  |  | (0.7\%) | (9.2\%) | (52.2\%) | (31.1\%) | (4.6\%) | (2.2\%) |  |
| $\stackrel{\rightharpoonup}{\otimes}$ | Chicken | 11 | 253 | 920 | 331 | 30 | 5 | 1,550 |
|  |  | (0.7\%) | (16.3\%) | (59.4\%) | (21.4\%) | (1.9\%) | (0.3\%) |  |
|  | Beef, pork |  | 108 | 765 | 561 | 80 | 17 | 1,551 |
|  |  | (1.3\%) | (7.0\%) | (49.3\%) | (36.2\%) | (5.2\%) | (1.1\%) |  |
|  | Ham, sausage |  |  |  |  | 99 | 47 | 1,537 |
|  |  | (1.7\%) | (14.3\%) | (44.5\%) | (30.0\%) | (6.4\%) | (3.1\%) |  |
|  | Green vegetables | 85 | 182 | 545 | 457 | 144 | 141 | 1,554 |
|  |  | (5.5\%) | (11.7\%) | (35.1\%) | (29.4\%) | (9.3\%) | (9.1\%) |  |
|  | Red and yellow | 32 | 106 | 480 | 551 | 210 | 174 | 1,553 |
|  |  | (2.1\%) | (6.8\%) | (30.9\%) | (35.5\%) | (13.5\%) | (11.2\%) |  |
|  | Hypochromic | 37 | 109 | 416 | 554 | 248 | 185 | 1,549 |
|  |  | (2.4\%) | (7.0\%) | (26.9\%) | (35.8\%) | (16.0\%) | (11.9\%) |  |
|  | Vegetable juice | 650 | 497 | 219 | 94 | 38 | 53 | 1,551 |
|  |  | (41.9\%) | (32.0\%) | (14.1\%) | (6.1\%) | (2.5\%) | (3.4\%) |  |
| $\begin{aligned} & \text { T1 } \\ & \text { 若 } \end{aligned}$ | Fruits | 43 | 122 | 345 | 407 | 270 | 366 | 1,553 |
|  |  | (2.8\%) | (7.9\%) | (22.2\%) | (26.2\%) | (17.4\%) | (23.6\%) |  |
|  | Fruit juice | 349 | 448 | 352 | 203 | 87 | 112 | 1,551 |
|  |  | (22.5\%) | (28.9\%) | (22.7\%) | (13.1\%) | (5.6\%) | (7.2\%) |  |
| $\begin{aligned} & \text { Q } \\ & 0 \\ & \stackrel{0}{\ddot{Z}} \end{aligned}$ | Natto | 166 | 398 | 608 | 256 | 85 | 44 | 1,557 |
|  |  | (10.7\%) | (25.6\%) | (39.0\%) | (16.4\%) | (5.5\%) | (2.8\%) |  |
|  | Miso soup | 31 | 80 | 218 | 315 | 317 | 597 | 1,558 |
|  |  | (2.0\%) | (5.1\%) | (14.0\%) | (20.2\%) | (20.3\%) | (38.3\%) |  |
|  | Tofu dishes |  | 283 | 661 | 355 | 136 | 56 | 1,556 |
|  |  | (4.2\%) | (18.2\%) | (42.5\%) | (22.8\%) | (8.7\%) | (3.6\%) |  |
|  | Boiled beans dish | 621 | 666 | 200 | 46 | 12 | 2 | 1,547 |
|  |  | (40.1\%) | (43.1\%) | (12.9\%) | (3.0\%) | (0.8\%) | (0.1\%) |  |
| Milk |  | 85 | 101 | 163 | 216 | 256 | 723 | 1,544 |
|  |  | (5.5\%) | (6.5\%) | (10.6\%) | (14.0\%) | (16.6\%) | (46.8\%) |  |
| Soy milk |  | 1,229 | 229 | 58 | 20 | 5 | 9 | 1,550 |
|  |  | (79.3\%) | (14.8\%) | (3.7\%) | (1.3\%) | (0.3\%) | (0.6\%) |  |
| Yogurt, fermented milk drink |  | 41 | 146 | 372 | 383 | 224 | 393 | 1,559 |


|  | $(2.6 \%)$ | $(9.4 \%)$ | $(23.9 \%)$ | $(24.6 \%)$ | $(14.4 \%)$ | $(25.2 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Since there are missing values for each item, totals may not match.

## 10. Child's emotions and behavior (Q10)

1) For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version)), among the 1,562 valid responses, 224 ( $14.3 \%$ ) were 16 points ${ }^{1}$ and above, and 89 (5.7\%) were 20 points $^{2}$ and above (Fig. 1). The average total points were 9.7 points. For boys, among the 778 valid responses, 125 ( $16.1 \%$ ) were 16 points and above; 55 (7.1\%) were 10 points and above. For girls, among the 784 valid responses, 99 (12.6\%) were 16 points and above; and 34 (4.3\%) were 20 points and above (Fig. 2). The average total score for boys was 10.4 points while the total score for girls was 9.0.
2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others, those that answered 'no' were 1,156 (74.4\%), 'yes (minor issues)' were 324 (20.9\%), 'yes (clear issues)' were 63 (4.1\%), and 'yes (serious issues)' were 10 ( $0.6 \%$ ).
3) Among those who answered 'yes' for 2), regarding whether or not their child is upset or concerned about the issue, those who answered 'not at all' were 148 ( $38.6 \%$ ); 'only a little' were 211 (55.1\%); 'very' were 18 (4.7\%); and 'greatly’ were 6 (1.6\%).


Fig. 1 Children's emotion and behavior for age group 4-6 (SDQ): Overall


Fig. 2 Children's emotion and behavior for age group 4-6 (SDQ): By gender

1) 16 points: A standard value indicated by previous research
2) 20 points: A standard established by doctors, etc. from Fukushima Medical University to provide support.

# Results of the FY 2013 Mental Health and Lifestyle Survey (For elementary school students) 

Among 11,167 people of the Mental Health and Lifestyle Survey (for elementary school students), 3,001 (26.9\%) provided valid responses. The breakdown was 1,528 (50.9\%) boys and $1,473(49.1 \%)$ girls with an average age of 9.4 years old.

As for the current address, 2,130 (71.1\%) lived within the prefecture and 865 (28.9\%) lived outside the prefecture.

## 1. The health condition of the child (Q1)

The ratios for the health state were: $655(22.8 \%)$ for 'Very good'; 1,275 (44.3\%)) for 'good'; 906 (31.5\%) for 'normal'; $34(1.2 \%)$ for 'bad'; and $6(0.2 \%)$ for very bad.

## 2. The current height and weight of the child (Q2)

The average height/weight of boys was: $121.5 \mathrm{~cm} / 25.0 \mathrm{~kg}$ for 1 st graders; $127.6 \mathrm{~cm} / 29.1 \mathrm{~kg}$ for $2^{\text {nd }}$ graders; $132.6 \mathrm{~cm} / 31.6 \mathrm{~kg}$ for $3^{\text {rd }}$ graders; $138.5 \mathrm{~cm} / 35.8 \mathrm{~kg}$ for $4^{\text {th }}$ graders; $143.8 \mathrm{~cm} / 39.1 \mathrm{~kg}$ for $5^{\text {th }}$ graders; and $152.4 \mathrm{~cm} / 44.9 \mathrm{~kg}$ for $6^{\text {th }}$ graders. The average height/weight of girls were: $120.5 \mathrm{~cm} / 23.3 \mathrm{~kg}$ for $1^{\text {st }}$ graders; $125.1 \mathrm{~cm} / 26.8 \mathrm{~kg}$ for $2^{\text {nd }}$ graders; $131.6 \mathrm{~cm} / 29.4 \mathrm{~kg}$ for $3^{\text {rd }}$ graders; $139.1 \mathrm{~cm} / 34.3 \mathrm{~kg}$ for $4^{\text {th }}$ graders; $145.0 \mathrm{~cm} / 38.3 \mathrm{~kg}$ for $5^{\text {th }}$ graders; and $150.3 \mathrm{~cm} / 44.2 \mathrm{~kg}$ for $6^{\text {th }}$ graders.

## 3. Currently treated diseases (Q3)

For currently treated diseases 1,881 ( $65.6 \%$ ) answered 'no' while 986 (34.4\%) answered 'yes'. The breakdown (multiple answers) of diseases for those who answered 'yes' are shown in Table 9 below.

Table 9 The breakdown of currently treated diseases

| Disease | Count |
| :--- | ---: |
| Allergic rhinitis | 352 |
| Odontopathy | 222 |
| Atopic dermatitis | 148 |
| Asthma | 137 |
| Common cold | 110 |
| Sinusitis/ empyema | 77 |
| Asthma, atopic dermatitis, allergies, <br> allergic conditions other than nasal <br> inflammation | 52 |
| Influenza | 49 |
| ADHD | 45 |
| Otitis media | 35 |
| Epilepsy | 14 |
| Other | 133 |

(Multiple answers)

## 4. Experience of hospitalization (Q4)

For experience of hospitalization, 1,929 (66.3\%) answered 'no' while 982 (33.7\%) answered 'yes'.

The breakdown of diseases for those who answered 'yes' (multiple answers) are the following in Table 10.

Among those who responded 'yes' to experience of hospitalization, 884 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 11.

Table 10 Breakdown of diseases during hospitalization

| Disease | Count |
| :--- | ---: |
| Pneumonia | 269 |
| Asthma | 134 |
| Mycoplasma pneumonia | 129 |
| Bronchitis | 120 |
| Gastroenteritis | 120 |
| Respiratory syncytial virus infection | 106 |
| Rotavirus infection | 83 |
| Febrile convulsion | 83 |
| Influenza | 76 |
| Common cold | 63 |
| Inguinal hernia | 59 |
| Kawasaki disease | 29 |
| Other | 220 |

(Multiple answers)

Table 11 Breakdown of diseases during hospitalization within the past year

| Disease | Count |
| :--- | ---: |
| Mycoplasma pneumonia | 8 |
| Asthma | 4 |
| Pneumonia | 3 |
| Common cold | 3 |
| Gastroenteritis | 3 |
| Inguinal hernia | 3 |
| Influenza | 2 |
| Febrile convulsion | 2 |
| Respiratory syncytial virus infection | 1 |
| Bronchitis | 1 |
| Kawasaki disease | 1 |
| Rotavirus infection | 0 |
| Other | 21 |

(Multiple answers)

## 5. Medical exam experience (Q5)

1) Those who answered 'no' for experience of CT scans were 2,470 ( $83.0 \%$ ), 'yes' were 368 (12.4\%) and 'I don't know' were 137 (4.6\%).
2) Those who answered 'no' for experience of examinations using X-rays (excluding CT and roentgenological examination) were 2,606 (88.9\%), 'yes' were 176 ( $6.0 \%$ ) and 'I don't know' were 151 (5.1\%).
Among those who answered 'yes', 118 had a fluoroscopy, 29 had an angiography, and 10 had a nuclear medicine scan.

## 6. Experience of radiation therapy treatment (Q6)

For experience of radiation therapy treatment, those who answered 'no' were 2,868 (96.7\%), 'yes' were 28 ( $0.9 \%$ ), and 'I don't know' were 71 (2.4\%).

## 7. Sleeping hours and naps (Q7)

The average going-to-bed time was 9:29 PM and the average waking time was 6:29 AM. The
average sleeping time was 8 hours and 55 minutes.

## 8. Regular amount of exercise (Q8)

For exercise (What is your regular amount of exercise?): those who answered 'almost every day’ were 200 ( $7.1 \%$ ); ‘ $2-4$ times a week' were 764 (27.0\%); ‘once a week' were 722 ( $25.5 \%$ ); and 'barely exercise' were 1,143 (40.4\%).

## 9. Diet (Q9)

The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 12 (next page).

Table 12 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among elementary school students
(Upper row is the number of individuals/lower row is ratio)

|  | I don't eat | Less than once a week | $\begin{gathered} 1-2 \\ \text { times a } \\ \text { week } \end{gathered}$ | 3-4 <br> times a week | 5-6 times a week | Everyday | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Breakfast | $\begin{array}{r} 18 \\ (0.6 \%) \end{array}$ | $\begin{array}{r} 6 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ (0.8 \%) \end{array}$ | $\begin{array}{r} 53 \\ (1.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 112 \\ (3.7 \%) \end{array}$ | $\begin{array}{r} 2,777 \\ (92.8 \%) \end{array}$ | 2,991 |
| Eating out (excluding school lunch) | $\begin{array}{r} 225 \\ (7.6 \%) \end{array}$ | $\begin{array}{r} 1,961 \\ (66.0 \%) \end{array}$ | $\begin{array}{r} 660 \\ (22.2 \%) \end{array}$ | $\begin{array}{r} 16 \\ (0.5 \%) \end{array}$ | $\begin{array}{r} 3 \\ (0.1 \%) \end{array}$ | $\begin{array}{r} 105 \\ (3.5 \%) \end{array}$ | 2,970 |
| Pre-cooked foods | $\begin{array}{r} 189 \\ (6.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,302 \\ (43.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,152 \\ (38.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 276 \\ (9.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (0.6 \%) \\ \hline \end{array}$ | 2,963 |


| Cooked rice |  | $\begin{array}{r} 0 \\ (0.0 \%) \end{array}$ | $\begin{array}{r} 3 \\ (0.1 \%) \end{array}$ | $\begin{array}{r} 18 \\ (0.6 \%) \end{array}$ | $\begin{array}{r} 97 \\ (3.2 \%) \end{array}$ | $\begin{array}{r} 339 \\ (11.3 \%) \end{array}$ | $\begin{array}{r} 2,534 \\ (84.7 \%) \end{array}$ | 2,991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bread |  | $\begin{array}{r} 50 \\ (1.7 \%) \end{array}$ | $\begin{array}{r} \hline 533 \\ (17.9 \%) \end{array}$ | $\begin{array}{r} \hline 1,133 \\ (38.1 \%) \end{array}$ | $\begin{array}{r} 631 \\ (21.2 \%) \end{array}$ | $\begin{array}{r} 256 \\ (8.6 \%) \end{array}$ | $\begin{array}{r} 368 \\ (12.4 \%) \end{array}$ | 2,971 |
| Fish dishes |  | $\begin{array}{r} 27 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 342 \\ (11.5 \%) \end{array}$ | $\begin{array}{r} 1,576 \\ (53.1 \%) \end{array}$ | $\begin{array}{r} 881 \\ (29.7 \%) \end{array}$ | $\begin{array}{r} 102 \\ (3.4 \%) \end{array}$ | $\begin{array}{r} 41 \\ (1.4 \%) \end{array}$ | 2,969 |
| $\begin{aligned} & \text { Z } \\ & \stackrel{0}{\sim} \end{aligned}$ | Chicken | $\begin{array}{r} 20 \\ (0.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 468 \\ (15.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,738 \\ (58.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 664 \\ (22.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 57 \\ (1.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (0.5 \%) \\ \hline \end{array}$ | 2,961 |
|  | Beef, pork | $\begin{array}{r} 15 \\ (0.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 176 \\ (5.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,318 \\ (44.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,243 \\ (41.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 182 \\ (6.1 \%) \end{array}$ | $\begin{array}{r} 43 \\ (1.4 \%) \\ \hline \end{array}$ | 2,977 |
|  | Ham, sausage | $\begin{array}{r} 45 \\ (1.5 \%) \end{array}$ | $\begin{array}{r} 653 \\ (22.1 \%) \end{array}$ | $\begin{array}{r} 1,298 \\ (44.0 \%) \end{array}$ | $\begin{array}{r} 746 \\ (25.3 \%) \end{array}$ | $\begin{array}{r} 152 \\ (5.1 \%) \end{array}$ | $\begin{array}{r} 59 \\ (2.0 \%) \end{array}$ | 2,953 |
|  | Green vegetables | $\begin{array}{r} 91 \\ (3.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 320 \\ (10.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,086 \\ (36.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 896 \\ (30.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 322 \\ (10.8 \%) \end{array}$ | $\begin{array}{r} 266 \\ (8.9 \%) \\ \hline \end{array}$ | 2,981 |
|  | Red and yellow | $\begin{array}{r} 48 \\ (1.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 301 \\ (10.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 951 \\ (31.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,031 \\ (34.6 \%) \end{array}$ | $\begin{array}{r} 358 \\ (12.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 288 \\ (9.7 \%) \\ \hline \end{array}$ | 2,977 |
|  | Hypochromic | $\begin{array}{r} 46 \\ (1.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 173 \\ (5.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 726 \\ (24.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 1,166 \\ (39.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 492 \\ (16.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 369 \\ (12.4 \%) \\ \hline \end{array}$ | 2,972 |
|  | Vegetable juice | $\begin{array}{r} 1,351 \\ (45.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 878 \\ (29.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 384 \\ (12.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 199 \\ (6.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 66 \\ (2.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (3.3 \%) \\ \hline \end{array}$ | 2,976 |
| $\begin{aligned} & \text { 利 } \\ & \text { E. } \end{aligned}$ | Fruits | $\begin{array}{r} 67 \\ (2.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 452 \\ (15.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 865 \\ (29.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 755 \\ (25.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 364 \\ (12.2 \%) \end{array}$ | $\begin{array}{r} \hline 479 \\ (16.1 \%) \end{array}$ | 2,982 |
|  | Fruit juice | $\begin{array}{r} 841 \\ (28.3 \%) \end{array}$ | $\begin{array}{r} 990 \\ (33.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 620 \\ (20.9 \%) \end{array}$ | $\begin{array}{r} 289 \\ (9.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 105 \\ (3.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 125 \\ (4.2 \%) \\ \hline \end{array}$ | 2,970 |
|  | Natto | $\begin{array}{r} 303 \\ (10.2 \%) \end{array}$ | $\begin{array}{r} 846 \\ (28.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,153 \\ (38.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 465 \\ (15.6 \%) \end{array}$ | $\begin{array}{r} 137 \\ (4.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 79 \\ (2.6 \%) \\ \hline \end{array}$ | 2,983 |
|  | Miso soup | $\begin{array}{r} 40 \\ (1.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 147 \\ (4.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 360 \\ (12.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 651 \\ (21.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 600 \\ (20.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,181 \\ (39.6 \%) \\ \hline \end{array}$ | 2,979 |
|  | Tofu dishes | $\begin{array}{r} 96 \\ (3.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 591 \\ (19.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,251 \\ (42.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 710 \\ (23.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 214 \\ (7.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (4.0 \%) \\ \hline \end{array}$ | 2,981 |
|  | Boiled beans dish | $\begin{array}{r} \hline 1,185 \\ (39.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,293 \\ (43.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 373 \\ (12.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 88 \\ (3.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ (0.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 12 \\ (0.4 \%) \\ \hline \end{array}$ | 2,967 |
| Milk |  | $\begin{array}{r} 105 \\ (3.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ (3.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 158 \\ (5.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 232 \\ (7.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 574 \\ (19.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,790 \\ (60.2 \%) \end{array}$ | 2,972 |
| Soy milk |  | $\begin{array}{r} 2,432 \\ (81.8 \%) \end{array}$ | $\begin{array}{r} 391 \\ (13.2 \%) \end{array}$ | $\begin{array}{r} 91 \\ (3.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 34 \\ (1.1 \%) \end{array}$ | $\begin{array}{r} 11 \\ (0.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (0.5 \%) \end{array}$ | 2,973 |


| Yogurt, fermented milk drink | 102 | 367 | 785 | 702 | 367 | 665 | 2,988 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $(3.4 \%)$ | $(12.3 \%)$ | $(26.3 \%)$ | $(23.5 \%)$ | $(12.3 \%)$ | $(22.3 \%)$ |  |

Since there are missing values for each item, totals may not match.

## 10. Child's emotions and behavior (Q10)

1) For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version)), among the 2,996 valid responses, 429 ( $14.3 \%$ ) were 16 points ${ }^{1}$ and above, and 20 $171(5.7 \%)$ were 20 points $^{2}$ and above (Fig. 3). The average total points were 9.4 points. For boys, among the 1,524 valid responses, 245 ( $16.1 \%$ ) were 16 points and above, and 108 (7.1\%) were 20 points and above. For girls, among the 1,472 valid responses, 184 ( $12.5 \%$ ) were 16 points and above and $63(4.3 \%)$ were 20 points and above (Fig. 4). The average total score for boys was 9.9 points while the total score for girls was 8.9 points.
2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others: those who answered 'no' were 2,073 (69.4\%); 'yes (minor issues)' were 751 ( $25.1 \%$ ); 'yes (clear issues)' were 133 ( $4.5 \%$ ); and 'yes (serious issues)' were 30 ( $1.0 \%$ ).
3) Among those who answered 'yes' for 2), regarding whether or not their child is upset or concerned about the issue: those who answered 'not at all' were 221 ( $25.0 \%$ ); 'only a little' were 581 ( $65.8 \%$ );'very' were 66 ( $7.5 \%$ ); and 'greatly' were 15 ( $1.7 \%$ ).


Fig. 3 Children's emotion and behavior among elementary school students (SDQ): Overall


[^5]Fig. 4 Children's emotion and behavior among elementary school students (SDQ): By gender

1) 16 points: A standard value indicated by previous research
2) 20 points: A standard established by doctors, etc. from Fukushima Medical University to provide support.

## Results for the FY 2013 Mental Health and Lifestyle Survey (For middle school students)

Among the 6,013 people for the survey regarding mental health and lifestyle habits (for middle school students), there were 1,348 (22.4\%) valid responses. The breakdown was 663 (49.2\%) boys and $685(50.8 \%)$ girls with an average age of 13.8 years old.

As for the current address, 1,031 (76.7\%) lived within the prefecture and 313 (23.3\%) lived outside the prefecture.

## 1. The health condition of the child (Q1)

The ratios for the health condition were: 262 (30.4\%) for 'Very good'; 264 (30.7\%) for 'good'; 310 (36.0\%) for 'normal'; 23 (2.7\%) for 'bad'; and 2 ( $0.2 \%$ ) for very bad.

## 2. The current height and weight of the child (Q2)

The average height/weight of boys was: $159.4 \mathrm{~cm} / 53.8 \mathrm{~kg}$ for 7 th graders; $165.3 \mathrm{~cm} / 56.9 \mathrm{~kg}$ for 8th graders; and $167.2 \mathrm{~cm} / 60.3 \mathrm{~kg}$ for 9 th graders. The average height/ weight for girls were: $154.2 \mathrm{~cm} / 46.0 \mathrm{~kg}$ for 7 th graders; $155.9 \mathrm{~cm} / 50.2 \mathrm{~kg}$ for 8 th graders; and $156.8 \mathrm{~cm} / 49.8 \mathrm{kgfor} 9 \mathrm{th}$ graders.

## 3. Sleeping hours (Q3)

1) The average sleeping time was 7 hours and 11 minutes.
2) For sleep satisfaction, 373 (43.0\%) answered 'it's sufficient', 400 ( $46.1 \%$ ) answered 'it's not quite enough', and 95 (10.9\%) answered 'it's not enough'.

## 4. Regular amount of exercise (Q4)

For exercise (aside from physical education classes, what is your regular amount of exercise?), those who answered 'almost every day' were 407 ( $46.7 \%$ ), ' $2-4$ times a week' were 124 ( $14.2 \%$ ), 'once a week' were 62 ( $7.1 \%$ ), and 'barely exercise' were 278 ( $31.9 \%$ ).

## 5. Diet (Q5)

The frequency of consuming food (drinks), breakfast, eating out, and pre-cooked food were as shown in Table 13 (next page).

Table 13 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out among middle school students
(Upper row is the number of individuals/lower row is ratio)

|  | I don't <br> eat | Less <br> than <br> once a <br> week | $1-2$ <br> times a <br> week | $3-4$ <br> times a <br> week | $5-6$ <br> times a <br> week | Everyday | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Breakfast | 17 | 10 | 11 | 18 | 52 | 762 | 870 |
| $(2.0 \%)$ | $(1.1 \%)$ | $(1.3 \%)$ | $(2.1 \%)$ | $(6.0 \%)$ | $(87.6 \%)$ |  |  |
| Eating out (excluding <br> school lunch) | 139 | 568 | 126 | 4 | 0 | 25 | 862 |
| Pre-cooked foods | $(16.1 \%)$ | $(65.9 \%)$ | $(14.6 \%)$ | $(0.5 \%)$ | $(0.0 \%)$ | $(2.9 \%)$ |  |


| Cooked rice |  | 0 | 1 | 6 | 37 | 125 | 700 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | $(0.0 \%)$ | $(0.1 \%)$ | $(0.7 \%)$ | $(4.3 \%)$ | $(14.4 \%)$ | $(80.6 \%)$ |$]$


| Yogurt, fermented milk drink | 54 | 127 | 220 | 185 | 90 | 192 | 868 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $(6.2 \%)$ | $(14.6 \%)$ | $(25.3 \%)$ | $(21.3 \%)$ | $(10.4 \%)$ | $(22.1 \%)$ |  |

Since there are missing values for each item, totals may not match.

## 6. Experiences from the earthquake disaster Multiple answers (Q6)

Experiences from the earthquake disaster were: 'earthquake' for 823; 'tsunami' for 114; and 'nuclear power plant accident' for 802; 'none' for 2.

## 7. Currently treated diseases (Q7)

For currently treated diseases 942 (72.9\%) answered 'no' while 351 (27.1\%) answered 'yes'.
The breakdown of diseases for individuals who answered 'yes' are shown in Table 14.

Table 14 The breakdown of currently treated diseases

| Disease | Count |
| :--- | ---: |
| Allergic rhinitis | 122 |
| Odontopathy | 73 |
| Atopic dermatitis | 50 |
| Asthma | 29 |
| Sinusitis/ empyema | 21 |
| Asthma, atopic dermatitis, allergies, <br> allergic conditions other than nasal <br> inflammation | 20 |
| ADHD | 20 |
| Common cold | 13 |
| Influenza | 11 |
| Epilepsy | 9 |
| Otitis media | 7 |
| Other | 78 |

(Multiple answers)

## 8. Experience of hospitalization (Q8)

For experience of hospitalization, 837 ( $64.7 \%$ ) answered 'no' while 456 ( $35.3 \%$ ) answered 'yes'.
The breakdown of those who answered 'yes' (multiple answers) are as shown in Table 15. Among those who responded 'yes' to experience of hospitalization, 419 answered that they did not become hospitalized due to a disease within the past year (responded 'none'). The breakdown of those who were hospitalized within the past year is shown below in Table 16 (multiple answers).

Table 15 Breakdown of diseases during hospitalization
Table 16 Breakdown of diseases during hospitalization within this year

| Disease | Count |
| :--- | ---: |
| Pneumonia | 130 |
| Asthma | 85 |
| Bronchitis | 59 |
| Mycoplasma pneumonia | 58 |
| Gastroenteritis | 58 |
| Influenza | 54 |
| Common cold | 36 |
| Febrile convulsion | 36 |
| Rotavirus infection | 23 |
| Inguinal hernia | 18 |
| Kawasaki disease | 15 |
| Respiratory syncytial virus infection | 13 |
| Other | 89 |

(Multiple answers)

| Disease | Count |
| :--- | ---: |
| Pneumonia | 4 |
| Mycoplasma pneumonia | 3 |
| Asthma | 2 |
| Bronchitis | 1 |
| Influenza | 1 |
| Febrile convulsion | 1 |
| Respiratory syncytial virus infection | 0 |
| Common cold | 0 |
| Gastroenteritis | 0 |
| Rotavirus infection | 0 |
| Kawasaki disease | 0 |
| Inguinal hernia | 0 |
| Other | 11 |

(Multiple answers)

## 9. Medical exam experience (Q9)

1) Those who answered 'no' for experience of CT scans were 1,062 ( $80.9 \%$ ), 'yes' were 208 ( $15.9 \%$ ), and 'I don't know' were 42 (3.2\%).
2) Those who answered 'no' for experience of examinations using X-rays (excluding CT and roentgenological examination) were 1,156 (89.1\%), 'yes' were 86 (6.6\%) and 'I don't know' were 55 (4.2\%).
Among those who answered 'yes', 61 had a fluoroscopy, 20 had an angiography, and 2 had a nuclear medicine scan.

## 10. Experience of radiation therapy treatment (Q10)

For experience of radiation therapy treatment, those who answered 'no' were 1,278 (97.7\%), 'yes' were $7(0.5 \%)$ and 'I don't know' were $23(1.8 \%)$.

## 11. Child's emotions and behavior (Q11)

1) For child's emotions and behavior (survey on child's emotions and behavior (SDQ Japanese version), among the 1,316 valid responses, 176 ( $13.4 \%$ ) were 16 points ${ }^{1}$ and above and 89 (6.8\%) were 20 points $^{2}$ and above (Fig. 5). The average total points were 8.7 points. For boys, among the 652 valid responses, 103 ( $15.8 \%$ ) were 16 points and above and 49 (7.5\%) were 20 points and above. For girls, among the 664 valid responses, 73 (11.0\%) were 16 points and above and 40 (6.0\%) were 20 points and above (Fig. 6). The average total score for boys was 9.3 points while the total score for girls was 8.1.
2) Regarding whether children have any issues in one or more areas regarding emotions, focus, behavior or interaction with others, those who answered 'no' were 926 ( $69.4 \%$ ), 'yes (minor issues)' were 300 ( $22.5 \%$ ), 'yes (clear issues)' were 70 (5.2\%), and 'yes (serious issues)' were 39 (2.9\%).
3) Among those that answered 'yes' for 2), regarding whether or not their child is confused or concerned of the issue, those that answered 'not at all' were 65 ( $16.6 \%$ ), 'only a little' were 267 (68.3\%), 'very' were 41 (10.5\%)), and 'greatly' were 18 (4.6\%).


Fig. 5 Children's emotion and behavior for middle school students (SDQ): Overall


Fig. 6 Children's emotion and behavior for middle school students (SDQ): By gender

1) 16 points: A standard value indicated by previous research
2) 20 points: A standard established by doctors, etc. from Fukushima Medical University to provide support.

## Results for the FY 2013 Mental Health and Lifestyle Survey (For the general public)

Among the 185,859 people for the survey regarding mental health and lifestyle habits (for the general public), there were 27,598 ( $14.8 \%$ ) valid responses. The breakdown was 12,317 ( $44.6 \%$ ) males and $15,281(55.4 \%)$ girls with an average age of 60.4 years old.

As for the current address, 21,489 (78.8\%) lived within the prefecture and 5,766 (21.2\%) lived outside the prefecture.

## 1. Health condition (Q1)

The ratios for the health condition were: 834 (3.5\%) for 'Very good'; 3,757 (15.8\%) for 'good'; 14,528 ( $61.1 \%$ ) for 'normal'; 4,229 ( $17.8 \%$ ) for 'bad'; and 423 ( $1.8 \%$ ) for 'very bad'.

## 2. Height and weight (Q2)

1) The average height/weight of males was: $165.8 \mathrm{~cm} / 66.4 \mathrm{~kg}$ and the average BMI was 24.1 $\mathrm{kg} / \mathrm{m}^{2}$.
Among males, those with less than BMI $18.5 \mathrm{~kg} / \mathrm{m}^{2}$ were 407 (3.6\%); $18.5 \mathrm{~kg} / \mathrm{m}^{2}$ and above and less than $30 \mathrm{~kg} / \mathrm{m}^{2}$ were 10,206 ( $91.1 \%$ ); $30 \mathrm{~kg} / \mathrm{m}^{2}$ and above and less than 40 $\mathrm{kg} / \mathrm{m}^{2}$ were $556(5.0 \%)$; and $40 \mathrm{~kg} / \mathrm{m}^{2}$ and above were $31(0.3 \%)$.
The average height/weight of females was $153.2 \mathrm{~cm} / 54.4 \mathrm{~kg}$ and the average BMI was 23.2 $\mathrm{kg} / \mathrm{m}^{2}$.
For females, those with a BMI less than $18.5 \mathrm{~kg} / \mathrm{m}^{2}$ were $1,086(8.1 \%) ; 18.5 \mathrm{~kg} / \mathrm{m}^{2}$ and above and less than $30 \mathrm{~kg} / \mathrm{m}^{2}$ were $11,613(86.6 \%) ; 30 \mathrm{~kg} / \mathrm{m}^{2}$ and above and less than 40 $\mathrm{kg} / \mathrm{m}^{2}$ were $654(4.9 \%)$; and $40 \mathrm{~kg} / \mathrm{m}^{2}$ and above were $50(0.4 \%)$.
2) For body weight change (did you have any body weight change compared to last year?), those who answered 'it increased by 3 kg or more' were 4,882 (18.6\%); 'it didn't change ( $\pm 3 \mathrm{~kg}$ )' were 18,718 ( $71.5 \%$ ); and 'it decreased by 3 kg or more' were 2,594 ( $9.9 \%$ ).
For body weight change for males, those who answered 'it increased by 3 kg or more' were 2,047 ( $17.4 \%$ ); 'it didn't change ( $\pm 3 \mathrm{~kg}$ )' were 8,531 ( $72.6 \%$ ); and 'it decreased by 3 kg or more' were 1,171 ( $10.0 \%$ ).
For body weight change for females, those who answered 'it increased by 3 kg or more' were 2,835 ( $19.6 \%$ ); 'it didn't change ( $\pm 3 \mathrm{~kg}$ )' were 10,187 ( $70.5 \%$ ); and 'it decreased by 3 kg or more' were 1,423 ( $9.9 \%$ ).

## 3. Medical history (Q3)

Medical history (Have you ever been diagnosed with some of the following diseases?) is as shown below in Table 17:

The breakdown (multiple answers) of diagnosed diseases within the past year is shown in Table 18 (next page). 5,435 individuals answered 'no disease'.

Table 17 Experience of diagnoses by general illness and the state of attending hospital as outpatient (Upper row is the number of individuals/lower row is ratio)

| Name of illness | Number of valid responses | Diagnosis |  | Currently attending hospital as outpatient |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No | Yes | Yes | No |
| Hypertension <br> (Or high blood pressure) | 26,338 | $\begin{array}{r} 14,914 \\ (56.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 11,424 \\ (43.4 \%) \end{array}$ | $\begin{array}{r} 10,119 \\ (90.2 \%) \end{array}$ | $\begin{array}{r} 1,100 \\ (9.8 \%) \\ \hline \end{array}$ |
| Diabetes <br> (Or high blood sugar) | 25,823 | $\begin{array}{r\|} \hline 22,144 \\ (85.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 3,679 \\ (14.2 \%) \end{array}$ | $\begin{array}{r} \hline 3,104 \\ (86.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 467 \\ (13.1 \%) \\ \hline \end{array}$ |
| Hyperlipidemia <br> (Or has high cholesterol or neutral fat) | 25,881 | $\begin{array}{r} 16,701 \\ (64.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 9,180 \\ (35.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 6,094 \\ (68.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2,769 \\ (31.2 \%) \\ \hline \end{array}$ |
| Mental disorder | 25,975 | $\begin{array}{r} \hline 22,994 \\ (88.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2,981 \\ (11.5 \%) \end{array}$ | $\begin{array}{r} 2,168 \\ (75.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 697^{*} \\ (24.3 \%) \\ \hline \end{array}$ |
| Cancer <br> (Including leukemia and lymphoma) | 26,299 | $\begin{array}{r} \hline 24,610 \\ (93.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,689 \\ (6.4 \%) \end{array}$ |  |  |
| Stroke | 26,203 | $\begin{array}{r} 25,006 \\ (95.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,197 \\ (4.6 \%) \end{array}$ |  |  |
| (Types of stroke) Multiple answers <br> Cerebral infarction <br> Cerebral hemorrhage <br> Subarachnoid hemorrhage <br> Other <br> I don't know |  |  | $\begin{array}{r}878 \\ 141 \\ 120 \\ 29 \\ 25 \\ \hline\end{array}$ |  |  |
| Heart disease | 26,327 | $\begin{array}{r} 22,837 \\ (86.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 3,490 \\ (13.3 \%) \end{array}$ |  |  |
| (Types of heart disease) Multiple answers <br> Myocardial infarction <br> Angina <br> Arrhythmia <br> Other <br> I don't know |  |  | $\begin{array}{r} 422 \\ 977 \\ 1,823 \\ 471 \\ 164 \\ \hline \end{array}$ |  |  |
| Chronic hepatitis | 26,398 | $\begin{array}{r} 25,873 \\ (98.0 \%) \end{array}$ | $\begin{array}{r} 525 \\ (2.0 \%) \\ \hline \end{array}$ |  |  |
| (Types of chronic hepatitis) Multiple answers <br> Hepatitis B <br> Hepatitis C <br> Other |  |  | 147 175 119 |  |  |
| Pneumonia <br> (in the past decade) | 26,470 | $\begin{array}{r} 25,525 \\ (96.4 \%) \end{array}$ | $\begin{array}{r} 945 \\ (3.6 \%) \end{array}$ |  |  |

[^6]since they have recovered".

Table 17 (continuation) Experience of diagnoses by general illness and the state of attending hospital as outpatient (Upper row is the number of individuals/lower row is ratio)

| Name of illness | Number of valid responses | Diagnosis |  |
| :---: | :---: | :---: | :---: |
|  |  | No | Yes |
| Bone fracture among 50 year olds and above |  | 17,098 | 2,360 |
| (Collected responses from 50 year olds and above at the time of filling out the questionnaire) | 19,458 | (87.9\%) | (12.1\%) |
| Thyroid disease |  | 25,292 | 1,014 |
|  | , | (96.1\%) | (3.9\%) |
| (Types of thyroid disease) Multiple answers |  |  | 245 |
| Hyperthyroidism (Basedow disease) |  |  |  |
| Hypothyroidism |  |  | 354 |
| Other |  |  | 207 |

Table 18 Diagnosed disease in the past year

| Disease | Count |
| :--- | ---: |
| Hypertension | 8,080 |
| Diabetes | 2,578 |
| Hyperlipidemia | 3,666 |
| Mental disorder | 1,420 |
| Cancer | 811 |
| Stroke | 380 |
| Heart disease | 1,957 |
| Chronic hepatitis | 284 |
| Pneumonia | 414 |
| Bone fracture* | 960 |
| Thyroid disease | 561 |

(Multiple answers)

* Collected responses from individuals 50 years old and above at the time of filling out the questionnaire


## 4. Medical exam experience (Q4)

1) Those who answered 'no' for experience of CT scans were 13,265 (49.8\%), 'yes' were 12,439 (46.7\%), and 'I don't know' were 958 (3.6\%).
2) Those who answered 'no' for experience of examinations using X-rays (excluding CT and X-ray examination) were 10,863 (41.2\%), 'yes' were 14,952 (56.7\%) and 'I don't know' were 567 (2.1\%).
3) For the question whether they experienced angiography, nuclear medicine scan or PET scan those who answered 'no' were 21,368 (81.4\%); 'yes' were 3,595 (13.7\%); and 'I don't know' were 1,295 (4.9\%).

Among those who answered 'yes', 2,432 had an angiography; 286 had a nuclear medicine scan; and 888 had a PET scan.

## 5. Experience of radiation therapy treatment (Q5)

For experience of radiation therapy treatment, those who answered 'no' were 24,743 ( $93.1 \%$ ), 'yes' were 1,237 (4.7\%)and 'I don't know’ were 584 (2.2\%).

## 6. Daily living functions (Q6)

1) Daily living functions (tell us if you can do the following tasks on your own) are as shown below in Table 19.

Table 19 General daily living functions (Count (ratio))

| Daily life tasks | Yes | No | Number of <br> valid <br> responses |
| :--- | ---: | ---: | ---: |
| 1. Eating a meal without assistance (does not <br> include the preparation of the meal) | $26,740(98.8 \%)$ | $328(1.2 \%)$ | 27,068 |
| 2. Changing clothes without assistance | $26,460(98.1 \%)$ | $517(1.9 \%)$ | 26,977 |
| 3. Going to the bathroom without assistance | $26,586(98.6 \%)$ | $389(1.4 \%)$ | 26,975 |
| 4. Buying commodities from the store | $25,390(94.1 \%)$ | $1,594(5.9 \%)$ | 26,984 |

2) For recreation activities (do you participate in recreational activities (karaoke, Japanese croquet, etc.) or local event (festivals etc.)?), those who answered 'no, barely' were 16,622 (62.0\%); ‘sometimes participate' were 7,738 (28.9\%); and 'frequently participate' were 2,458 (9.2\%).

## 7. Sleep (Q7)

1) The average sleeping time was 7 hours and 2 minutes.
2) As for sleep satisfaction, those who answered 'satisfied' were 9,163 (39.4\%); 'slightly dissatisfied' were 10,378 (44.7\%); 'very dissatisfied' were 3,048 (13.1\%); and 'extremely dissatisfied or couldn't sleep at all" were 652 (2.8\%).
3) Experiences related to sleep (have you experienced the following at least 3 times a week?) are shown below in Table 20.

Table 20 Experiences related to sleep in general (count (ratio))

|  | Yes | No | Number of <br> valid responses |
| :---: | :---: | :---: | :---: |
| 1. It takes time to fall sleep at night after going to bed. | $\begin{array}{r} 10,466 \\ (44.1 \%) \end{array}$ | $\begin{array}{r} 13,291 \\ (55.9 \%) \end{array}$ | 23,757 |
| 2. I wake up during the night in the middle of sleep | $\begin{array}{r} 16,015 \\ (67.0 \%) \end{array}$ | $\begin{array}{r} 7,887 \\ (33.0 \%) \end{array}$ | 23,902 |
| 3. I wake up before the time I set and can't go back to sleep. | $\begin{array}{r} 9,832 \\ (42.0 \%) \end{array}$ | $\begin{array}{r} 13,592 \\ (58.0 \%) \end{array}$ | 23,424 |
| 4. I don't get enough total sleep. | $\begin{array}{r} 8,290 \\ (36.0 \%) \end{array}$ | $\begin{array}{r} 14,712 \\ (64.0 \%) \end{array}$ | 23,002 |
| 5. I feel tired during the day. | $\begin{array}{r} 6,492 \\ (28.5 \%) \end{array}$ | $\begin{array}{r} 16,326 \\ (71.5 \%) \end{array}$ | 22,818 |
| 6. My physical and mental activity levels during the day are low. | $\begin{array}{r} 7,165 \\ (31.1 \%) \end{array}$ | $\begin{array}{r} 15,884 \\ (68.9 \%) \end{array}$ | 23,049 |
| 7. I feel sleepy during the day. | $\begin{array}{r} 11,442 \\ (49.0 \%) \end{array}$ | $\begin{array}{r} 11,920 \\ (51.0 \%) \end{array}$ | 23,362 |

## 8. Exercise (Q8)

For exercise, those who answered 'almost every day' were 4,325 (16.0\%); '2-4 times per week' were 6,467 (23.9\%); 'once a week' were 4,169 (15.4\%); and 'almost never' were 12,143 (44.8\%).

## 9. Opportunities to laugh (Q9)

As for opportunities to laugh (how often do you laugh out loud in your daily life?), those who answered 'almost every day' were 7,057 ( $26.0 \%$ ); 'around 1-5 times per week' were 10,972 (40.5\%); 'around 1-3 times per month' were 5,371 (19.8\%); 'rarely' were 3,722 (13.7\%).

## 10. Smoking (Q10)

1) For second-hand smoking (have you ever experienced second-hand smoking at home or at work in the past decade?), those who answered 'every day' were 5,346 (20.6\%); 'around 4-5 times per week' were 1,621 (6.2\%); 'sometimes' were 7,283 ( $28.0 \%$ ); and 'rarely' were 11,739 (45.2\%).
2) For smoking before the earthquake disaster (have you smoked before the earthquake disaster on Mar $11^{\text {th }} 2011$ ?), those who answered 'no' were 17,783 (70.5\%) and 'yes' were 7,428 (29.5\%).
3) As for smoking (do you smoke (tobacco or cigarettes)? this excludes cigars and pipes), those who answered 'never' were 13,688 (58.4\%); 'I quit' were 5,648 (24.1\%); and 'I smoke' were 4,085 (17.4\%).

For those who responded 'I smoke', the average number of cigarettes was 22.1 per day and the average time period of smoking was 29.0 years.

## 11. Alcohol consumption (Q11)

1) For alcohol consumption prior to the earthquake disaster, those who answered 'No or barely drink (less than once a month)' were 13,530 (52.9\%); 'Yes (at least once a month)' were 12,053 (47.1\%).
2) For alcohol consumption (do you currently drink alcohol?), those who answered 'No or barely drink (less than once a month)' were 13,174 (53.0\%); 'I quit' were 839 (3.4\%); and 'Yes (at least once a month)' were 10,841 (43.6\%).
3) Among those who answered 'yes (at least once per month)', those who answered ' 0 times per week' were 42 ( $0.4 \%$ ); 'once a week' were 1,628 ( $15.8 \%$ ); 'twice a week' were 976 (9.5\%); 'three times a week' were 1,024 ( $10.0 \%$ ); ‘ 4 times a week' were 632 ( $6.1 \%$ ); ‘ 5 times a week' were 1,182 ( $11.5 \%$ ); ' 6 times a week' were 1,286 ( $12.5 \%$ ); and ' 7 times a week' were 3,517 (34.2\%).
4) The average alcohol consumption per day was around 1.0 go per day in terms of Japanese sake. Among the 24,854 valid responses for alcohol consumption (Q11-2), 1,962 (7.9\%) consumed a large quantity of alcohol ( 2 go and above in terms of Japanese sake).
5) For experience related to alcohol consumption (answer the following questions based on the past 30 days (CAGE: Alcohol dependence standard)), the responses of each items are shown in Table 21 (next page) below. 'Yes' was 1 point and the total points of the 4 items were calculated.
The results by age group are shown in Table 22 (next page) and overall, 0 points were 5,972 (59.9\%); 1 point were 2,348 ( $23.6 \%$ ); 2 points were $9879.9 \%$ ); 3 points were 491 (4.9\%);and 4 points were 164 (1.6\%).
For males, 0 points were 3,525 (53.4\%); 1 point were 1,775 (26.9\%); 2 points were 763 (11.6\%); 3 points were 401 (6.1\%); and 4 points were 132 (2.0\%). For females, 0 points were 2,447 ( $72.7 \%$ ); 1 point were 573 ( $17.0 \%$ ); 2 points were 224 ( $6.7 \%$ ); 3 points were $90(2.7 \%)$; and 4 points were 32 ( $1.0 \%$ ).

Table 21 Experience related to alcohol consumption (Upper row is the number of individuals/lower row is ratio)

|  |  | No | Yes | Number <br> of valid <br> responses |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Have you ever felt that you must cut down your <br> alcohol consumption? | 6,798 <br> $(67.6 \%)$ | 3,261 <br> $(32.4 \%)$ | 10,059 |
| 2 | Have you ever been annoyed by others criticizing <br> your drinking habits? | 9,024 <br> $(90.1 \%)$ | 987 <br> $(9.9 \%)$ | 10,011 |
| 33 | Have you ever felt bad or sorry for your drinking <br> habits? | 8,684 <br> $(86.6 \%)$ | 1,347 <br> $(13.4 \%)$ | 10,031 |
| 4 | Have you had a "hair of the dog" drink in order to <br> calm your senses or to cure a hangover? | 9,079 <br> $(90.6 \%)$ | 946 <br> $(9.4 \%)$ | 10,025 |

Since there are missing values for each item, totals may not match.

Table 22 Experience related to alcohol consumption by age group (Upper row is the number of individuals/lower row is ratio)

|  | 0 points | 1 point | 2 points | 3 points | 4 points | Number of valid responses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20s | $\begin{array}{r} 303 \\ (74.3 \%) \end{array}$ | $\begin{array}{r} 58 \\ (14.2 \%) \end{array}$ | $\begin{array}{r} 32 \\ (7.8 \%) \end{array}$ | $\begin{array}{r} 14 \\ (3.4 \%) \end{array}$ | $\begin{array}{r} 1 \\ (0.2 \%) \end{array}$ | 408 |
| 30s | $\begin{array}{r} 738 \\ (65.1 \%) \end{array}$ | $\begin{array}{r} 215 \\ (19.0 \%) \end{array}$ | $\begin{array}{r} 101 \\ (8.9 \%) \end{array}$ | $\begin{array}{r} 60 \\ (5.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 20 \\ (1.8 \%) \end{array}$ | 1,134 |
| 40s | $\begin{array}{r} 761 \\ (61.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (21.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 131 \\ (10.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 57 \\ (4.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 20 \\ (1.6 \%) \\ \hline \end{array}$ | 1,234 |
| 50s | $\begin{array}{r} 996 \\ (56.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 449 \\ (25.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 190 \\ (10.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 88 \\ (5.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 37 \\ (2.1 \%) \\ \hline \end{array}$ | 1,760 |
| 60s | $\begin{array}{r} 1,747 \\ (57.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 751 \\ (24.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 305 \\ (10.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 174 \\ (5.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 58 \\ (1.9 \%) \\ \hline \end{array}$ | 3,035 |
| 70s and above | $\begin{array}{r} 1,427 \\ (59.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 610 \\ (25.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 228 \\ (9.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (4.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (1.2 \%) \\ \hline \end{array}$ | 2,391 |
| Overall | $\begin{array}{r} 5,972 \\ (59.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2,348 \\ (23.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 987 \\ (9.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 491 \\ (4.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 164 \\ (1.6 \%) \\ \hline \end{array}$ | 9,962 |

## 12. Diet (Q12)

The frequency of consuming food (drinks), breakfast, eating, and pre-cooked food were as shown in Table 23 (next page).

Table 23 Frequencies of eating (drinking) pre-cooked foods, breakfast and eating out for the general public (Upper row is the number of individuals/lower row is ratio)

|  | I don't <br> eat | Less <br> than <br> once a <br> week | $1-2$ <br> times a <br> week | $3-4$ <br> times a <br> week | $5-6$ <br> times a <br> week | Everyday | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Breakfast | 1,124 | 256 | 572 <br> $(4.2 \%)$ | 857 <br> $(1.0 \%)$ | 958 <br> $(2.1 \%)$ | 22,902 <br> $(3.2 \%)$ | 26,669 |
| Eating out | 7,151 | 10,889 | 4,098 | 880 <br> $(85.9 \%)$ | 344 <br> $(16.6 \%)$ | 1,320 | 24,682 |
|  | $(29.0 \%)$ | $(44.1 \%)$ | $(16.6 \%)$ | $(5.3 \%)$ |  |  |  |
| Pre-cooked foods | 3,770 | 8,146 | 7,401 | 3,491 | 1,059 | 1,349 | 25,216 |
|  | $(15.0 \%)$ | $(32.3 \%)$ | $(29.4 \%)$ | $(13.8 \%)$ | $(4.2 \%)$ | $(5.3 \%)$ |  |


| Cooked rice |  | $\begin{array}{r} 240 \\ (0.9 \%) \end{array}$ | $\begin{array}{r} 180 \\ (0.7 \%) \end{array}$ | $\begin{array}{r} 466 \\ (1.7 \%) \end{array}$ | $\begin{array}{r} 1,436 \\ (5.4 \%) \end{array}$ | $\begin{array}{r} 2,378 \\ (8.9 \%) \end{array}$ | $\begin{array}{r} 22,023 \\ (82.4 \%) \end{array}$ | 26,723 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bread |  | $\begin{array}{r} 2,811 \\ (11.4 \%) \end{array}$ | $\begin{array}{r} 7,469 \\ (30.3 \%) \end{array}$ | $\begin{array}{r} 6,150 \\ (25.0 \%) \end{array}$ | $\begin{array}{r} 2,998 \\ (12.2 \%) \end{array}$ | $\begin{array}{r} 1,235 \\ (5.0 \%) \end{array}$ | $\begin{array}{r} 3,967 \\ (16.1 \%) \end{array}$ | 24,630 |
| Fish dishes |  | $\begin{array}{r} 422 \\ (1.6 \%) \end{array}$ | $\begin{array}{r} 2,684 \\ (10.4 \%) \end{array}$ | $\begin{array}{r} 8,264 \\ (31.9 \%) \end{array}$ | $\begin{array}{r} 8,654 \\ (33.4 \%) \end{array}$ | $\begin{array}{r} 2,546 \\ (9.8 \%) \end{array}$ | $\begin{array}{r} 3,362 \\ (13.0 \%) \end{array}$ | 25,932 |
| $\begin{aligned} & \mathfrak{Z} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | Chicken | $\begin{array}{r} 1,684 \\ (6.7 \%) \end{array}$ | $\begin{array}{r} 7,068 \\ (28.0 \%) \end{array}$ | $\begin{array}{r} 10,665 \\ (42.3 \%) \end{array}$ | $\begin{array}{r} 4,662 \\ (18.5 \%) \end{array}$ | $\begin{array}{r} 676 \\ (2.7 \%) \end{array}$ | $\begin{array}{r} 481 \\ (1.9 \%) \end{array}$ | 25,236 |
|  | Beef, pork | $\begin{array}{r} 986 \\ (3.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,680 \\ (18.1 \%) \end{array}$ | $\begin{array}{r} 10,965 \\ (42.3 \%) \end{array}$ | $\begin{array}{r} 7,417 \\ (28.6 \%) \end{array}$ | $\begin{array}{r} 1,180 \\ (4.6 \%) \end{array}$ | $\begin{array}{r} 682 \\ (2.6 \%) \end{array}$ | 25,910 |
|  | Ham, sausage | $\begin{array}{r} 2,812 \\ (11.2 \%) \end{array}$ | $\begin{array}{r} 9,078 \\ (36.1 \%) \end{array}$ | $\begin{array}{r} 8,284 \\ (32.9 \%) \end{array}$ | $\begin{array}{r} 3,452 \\ (13.7 \%) \end{array}$ | $\begin{array}{r} 758 \\ (3.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 771 \\ (3.1 \%) \\ \hline \end{array}$ | 25,155 |
|  | Green vegetables | $\begin{array}{r} 466 \\ (1.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} \hline 2,419 \\ (9.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 5,976 \\ (22.7 \%) \\ \hline \end{array}$ | $\begin{array}{r} 7,080 \\ (26.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 3,833 \\ (14.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 6,609 \\ (25.1 \%) \\ \hline \end{array}$ | 26,383 |
|  | Red and yellow | $\begin{array}{r} 456 \\ (1.7 \%) \end{array}$ | $\begin{array}{r} 2,998 \\ (11.4 \%) \end{array}$ | $\begin{array}{r} 6,762 \\ (25.7 \%) \end{array}$ | $\begin{array}{r} 7,412 \\ (28.2 \%) \end{array}$ | $\begin{array}{r} 3,785 \\ (14.4 \%) \end{array}$ | $\begin{array}{r} 4,892 \\ (18.6 \%) \end{array}$ | 26,305 |
|  | Hypochromic | $\begin{array}{r} 278 \\ (1.1 \%) \end{array}$ | $\begin{array}{r} 1,551 \\ (5.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,892 \\ (18.6 \%) \end{array}$ | $\begin{array}{r} 7,969 \\ (30.3 \%) \end{array}$ | $\begin{array}{r} 4,905 \\ (18.7 \%) \end{array}$ | $\begin{array}{r} 6,684 \\ (25.4 \%) \end{array}$ | 26,279 |
|  | Vegetable juice | $\begin{array}{r} 11,098 \\ (43.7 \%) \end{array}$ | $\begin{array}{r} 6,624 \\ (26.1 \%) \end{array}$ | $\begin{array}{r} 3,211 \\ (12.6 \%) \end{array}$ | $\begin{array}{r} 1,746 \\ (6.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 790 \\ (3.1 \%) \end{array}$ | $\begin{array}{r} 1,953 \\ (7.7 \%) \\ \hline \end{array}$ | 25,422 |
| $\begin{aligned} & \text { Ty } \\ & \text { 首 } \end{aligned}$ | Fruits | $\begin{array}{r} 1,647 \\ (6.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,469 \\ (17.0 \%) \end{array}$ | $\begin{array}{r} 5,256 \\ (20.0 \%) \end{array}$ | $\begin{array}{r} 4,762 \\ (18.1 \%) \end{array}$ | $\begin{array}{r} 2,838 \\ (10.8 \%) \end{array}$ | $\begin{array}{r} 7,368 \\ (28.0 \%) \end{array}$ | 26,340 |
|  | Fruit juice | $\begin{array}{r} 10,646 \\ (42.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 7,526 \\ (30.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 3,590 \\ (14.3 \%) \end{array}$ | $\begin{array}{r} 1,657 \\ (6.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 653 \\ (2.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,027 \\ (4.1 \%) \\ \hline \end{array}$ | 25,099 |
| $\begin{aligned} & \infty \\ & \underset{<}{2} \\ & \stackrel{గ}{0} \\ & 0 \end{aligned}$ | Natto | $\begin{array}{r} \hline 2,567 \\ (9.8 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,850 \\ (18.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 6,666 \\ (25.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 5,130 \\ (19.5 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2,508 \\ (9.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,533 \\ (17.3 \%) \\ \hline \end{array}$ | 26,254 |
|  | Miso soup | $\begin{array}{r} 809 \\ (3.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 1,742 \\ (6.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 2,834 \\ (10.7 \%) \end{array}$ | $\begin{array}{r} 4,050 \\ (15.3 \%) \end{array}$ | $\begin{array}{r} 3,512 \\ (13.3 \%) \end{array}$ | $\begin{array}{r} 13,509 \\ (51.1 \%) \end{array}$ | 26,456 |
|  | Tofu dishes | $\begin{array}{r} 791 \\ (3.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,295 \\ (16.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} 7,878 \\ (30.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 7,057 \\ (26.9 \%) \\ \hline \end{array}$ | $\begin{array}{r} 3,184 \\ (12.1 \%) \end{array}$ | $\begin{array}{r} 3,038 \\ (11.6 \%) \\ \hline \end{array}$ | 26,243 |
|  | Boiled beans dish | $\begin{array}{r} 6,784 \\ (26.5 \%) \end{array}$ | $\begin{array}{r} 10,000 \\ (39.0 \%) \\ \hline \end{array}$ | $\begin{array}{r} 4,968 \\ (19.4 \%) \end{array}$ | $\begin{array}{r} 2,205 \\ (8.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 806 \\ (3.1 \%) \\ \hline \end{array}$ | $\begin{array}{r} 879 \\ (3.4 \%) \\ \hline \end{array}$ | 25,642 |
| Milk |  | $\begin{array}{r} 7,044 \\ (27.6 \%) \end{array}$ | $\begin{array}{r} 4,204 \\ (16.5 \%) \end{array}$ | $\begin{array}{r} 3,331 \\ (13.1 \%) \end{array}$ | $\begin{array}{r} 2,726 \\ (10.7 \%) \end{array}$ | $\begin{array}{r} 1,679 \\ (6.6 \%) \\ \hline \end{array}$ | $\begin{array}{r} 6,507 \\ (25.5 \%) \end{array}$ | 25,491 |
| Soy milk |  | $\begin{array}{r} 17,838 \\ (71.1 \%) \end{array}$ | $\begin{array}{r} 3,805 \\ (15.2 \%) \end{array}$ | $\begin{array}{r} 1,274 \\ (5.1 \%) \end{array}$ | $\begin{array}{r} 792 \\ (3.2 \%) \\ \hline \end{array}$ | $\begin{array}{r} 415 \\ (1.7 \%) \end{array}$ | $\begin{array}{r} 965 \\ (3.8 \%) \\ \hline \end{array}$ | 25,089 |
| Yogurt, fermented milk drink |  | $\begin{array}{r} 3,722 \\ (14.0 \%) \end{array}$ | $\begin{array}{r} 4,376 \\ (16.5 \%) \end{array}$ | $\begin{array}{r} 4,359 \\ (16.4 \%) \end{array}$ | $\begin{array}{r} 3,708 \\ (13.9 \%) \end{array}$ | $\begin{array}{r} \hline 2,397 \\ (9.0 \%) \end{array}$ | $\begin{array}{r} 8,033 \\ (30.2 \%) \end{array}$ | 26,595 |

Since there are missing values for each item, totals may not match.

## 13. Overall mental health (Q13)

1) For overall mental health (K6), among the 22,836 valid responses, the number of those with 13 points* and above was 2,349 (10.3\%) (Fig. 7). The average points were 5.3 points. For males, among the 10,338 valid responses, the number of those with 13 points and above was 917 ( $8.9 \%$ ). For females, among the 12,498 valid responses, 13 points and above were 1,432 (11.5\%) (Fig. 8). The average points for males and females were 4.8 and 5.7 points respectively.

Table 24 (next page) shows this data by age group.


Fig. 7 The general mental state (K6): Overall


Fig. 8 The general mental state (K6): By gender

Table 24 General mental health state (K6): by age group (count (ratio))

|  | 13 points and <br> above | Number of valid <br> responses |
| :--- | :---: | :---: |
| 10 s | $20(4.4 \%)$ | 450 |
| 20 s | $102(9.7 \%)$ | 1,053 |
| 30 s | $234(9.7 \%)$ | 2,411 |
| 40 s | $263(10.9 \%)$ | 2,415 |
| 50 s | $353(10.5 \%)$ | 3,369 |
| 60 s | $588(9.4 \%)$ | 6,249 |
| 70 and above | $789(11.5 \%)$ | 6,889 |

* 13 points:A standard value indicated by previous research

2) For whether or not there were difficulties in daily life caused by experience/condition, those who answered 'not at all' were 13,883 (58.4\%); 'just a little' were 5, 730 ( $24.1 \%$ ); 'sometimes' were 2,720 ( $11.4 \%$ ); 'most of the time' were 642 ( $2.7 \%$ ); and 'always' were 783 (3.3\%).

## 14. Experiences during the disaster (Q14)

1) Experiences from the disaster (multiple answers) were: 'earthquake' for 24,692 ; 'tsunami' for 4,655 ; 'nuclear power plant accident' for 24,623 ; and 'none' for 239.
2) For whether or not one experienced a life-threatening event, those who answered 'yes' were 15,282 (60.9\%) and 'no' were 9,794 (39.1\%).

## 15. Traumatic response (Q15)

1) Among the 22,718 valid responses, those who had 44 points* and above for traumatic response (PCL) were 3,899 ( $17.2 \%$ ) for (Fig. 9 (next page)). The average score was 31.0 points.
For males, among the 10,249 valid responses, 44 points and above were 1,625 (15.9\%). For females, among the 12,469 valid responses, 44 points and above were 2,274 (18.2\%) (Fig. 10 (next page)). The average points for males and females were 30.3 and 31.7 points, respectively.
The data based on age group is shown in table 25 (next page).
2) For whether or not there were difficulties in daily life due to such experience and condition, 'yes' were 5,360 (23.4\%) and 'no' were 17,529 (76.6\%).


Fig. 9 General traumatic response (PCL): Overall


Fig. 10 General traumatic response (PCL): based on gender

Table 25 General traumatic response (PCL): by age group (count (ratio))

|  | 44 points and <br> above | Number of valid <br> responses |
| :--- | :---: | :---: |
| 10 s | $17(3.8 \%)$ | 452 |
| 20 s | $108(10.4 \%)$ | 1,039 |
| 30 s | $275(11.4 \%)$ | 2,404 |
| 40 s | $344(14.3 \%)$ | 2,404 |
| 50 s | $480(14.3 \%)$ | 3,361 |
| 60 s | $988(15.8 \%)$ | 6,234 |
| 70 s and above | $1,687(24.7 \%)$ | 6,824 |

* 44 points: a standard value indicated by previous research


## 16. Difficulties in daily life (Q16)

1) The frequency of experiencing difficulties in daily life within the past month were: 1,039 (19.9\%) for 'frequent'; 2,485 (47.6\%) for 'sometimes'; 1,310 (25.1\%) for 'rarely'; and 385 (7.4\%) for 'never'.

The responses for 2)-4) targeted only those that answered 'frequent', 'sometimes' and 'rarely' for 1).
2) The ratio for difficulties related to work, school and housework, etc. were: 165 (3.8\%) for 'none'; $1,945(44.6 \%)$ for 'slight'; 1,509 (34.6\%) for 'moderate'; 418 ( $9.6 \%$ ) for 'severe', and 322 (7.4\%) for 'extremely severe'.
3) The ratio for difficulties in human relations and spending days off were: 207 (4.6\%) for 'none'; $1,815(40.5 \%)$ for 'slight'; 1,612 (36.0\%) for 'moderate'; 522 (11.7\%) for 'severe'; and 323 ( $7.2 \%$ ) for 'extremely severe'.
4) The ratio for difficulties in family communication and roles were: 367 (8.2\%) for 'none'; 1,756 (39.4\%) for 'slight'; 1,503 (33.8\%) for 'moderate'; 500 (11.2\%) for 'severe'; and 326 (7.3\%) for 'extremely severe'.

## 17. Current living conditions (Q17)

1) For whether or not one had to live separately from family due to disaster, 10,480 (39.3\%) answered 'yes' and 16,191 (60.7\%) answered 'no'.
2) For the number of residents in one household (including self), the ratios before the disaster were: 1,914 (7.5\%) for 'living alone'; 6,043 (23.8\%) for ' 2 residents'; 5,037 (19.8\%) for '3 residents'; 4,272 (16.8\%) for '4 residents'; 3,058 (12.0\%) for '5 residents'; 2,558 (10.1\%) for ' 6 residents'; $1,566(6.2 \%)$ for ' 7 residents'; $640(2.5 \%)$ for ' 8 residents'196 ( $0.8 \%$ ) for ' 9 residents'; and 128 ( $0.5 \%$ ) for ' 10 residents and above'.

The current ratios were: 3,826 (14.6\%) for 'living alone'; 9,776 (37.4\%) for ' 2 residents'; 5,352 (20.5\%) for '3 residents'; 3,485 (13.3\%) for '4 residents'; 1,885 (7.2\%) for '5 residents'; $1,040(4.0 \%)$ for ' 6 residents'; $499(1.9 \%)$ for ' 7 residents'; $160(0.6 \%)$ for ' 8 residents'; $62(0.2 \%)$ for ' 9 residents'; and $50(0.2 \%)$ for ' 10 residents and above'.
3) For current residence, 8,302 ( $31.5 \%$ ) lived in municipally subsidized rental housing; 4,168 (15.8\%) in temporary housing; 256 (1.0\%) in restoration public housing; 3,438 (13.0\%) in rented houses/apartments; $540(2.0 \%)$ in relative's houses; $8,843(33.5 \%)$ in owned houses; and $833(3.2 \%)$ in other kinds of habitats.
4) The number of times of moving since the disaster to present was: 0 times for $2,362(9.3 \%)$; 1 time for 2,585 ( $10.2 \%$ ); 2 times for 3,247 ( $12.8 \%$ ) ; 3 times for 4,334 ( $17.1 \%$ ) ; 4 times for 4,183 ( $16.5 \%$ ) ; and 5 times for 8,643 (34.1\%).
5) For the form of employment: 6,437 (25.0\%) were full-time/independent; 1,964 (7.6\%) were part-time; and 17,321 (67.3\%) were unemployed (including students and homemakers).
6) For the work situation (has your work situation changed due to the disaster and nuclear
accident?) 11,455 (50.4\%) said 'it changed' while 11,268 (49.6\%) said 'it did not change'.
7) Among those who responded 'it changed', the details of this change (multiple answers) were: 1,318 for 'I started a new job'; 5,829 for 'I lost my job'; 1,434 for 'I changed my job'; 1,506 for 'My position changed within the same company/organization; and 2,007 for other.
8) For how one sees their financial circumstances; 3,569 (14.3\%) said 'tough'; 6,350 (25.5\%) said 'slightly tough'; 13,736 ( $55.2 \%$ ) said 'normal'; 919 (3.7\%) said 'slightly comfortable'; and 301 ( $1.2 \%$ ) said 'comfortable'.

## 18. Human relations (Q18)

For current human relations in daily life (LSNS-6), among the 23,886 valid responses, 9,727 ( $40.7 \%$ ) had less than 12 points* (Fig. 11). The average score was 12.9 points.

For males, among the 10,644 valid responses, 4,614 (43.3\%) had less than 12 points. For females, among the 13,242 valid responses, 5,113 (38.6\%) had less than 12 points (Fig. 12). The average score for males and females were 12.6 points and 13.2 points respectively.

The data by age group is shown in Table 26 (next page).


Fig. 11 Human relations (LSNS-6): Overall


01223456789101112131415161718192021222324252627282930
Total score
Fig. 12 Human relations (LSNS-6): By gender

Table 26 Human relations (LSNS-6):by age group (count (ratio))

|  | Less than 12 | 12 points and <br> above | Number of valid <br> responses |
| :--- | ---: | ---: | :---: |
| 10 s | $137(29.3 \%)$ | $331(70.7 \%)$ | 468 |
| 20 s | $449(41.9 \%)$ | $623(58.1 \%)$ | 1,072 |
| 30 s | $1,239(50.7 \%)$ | $1,204(49.3 \%)$ | 2,443 |
| 40 s | $1,395(57.3 \%)$ | $1,038(42.7 \%)$ | 2,433 |
| 50 s | $1,783(51.5 \%)$ | $1,681(48.5 \%)$ | 3,464 |
| 60 s | $2,578(39.6 \%)$ | $3,929(60.4 \%)$ | 6,507 |
| 70 s and above | $2,146(28.6 \%)$ | $5,353(71.4 \%)$ | 7,499 |

* 12 points:A standard value indicated by previous research


## 19. Currently residing area (Q19)

The data for the currently residing area (please answer the following questions regarding the area you currently reside) is shown in Table 27.

Table 27 Currently residing area

|  |  | Strongly agree | Somewhat agree | Cannot say | Somewhat disagree | Strongly disagree | Number <br> of valid <br> responses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | The people in this area help each other mutually. | $\begin{array}{r} 2,592 \\ (9.9 \%) \end{array}$ | $\begin{array}{r} 9,645 \\ (36.7 \%) \end{array}$ | $\begin{array}{r} 8,919 \\ (33.9 \%) \end{array}$ | $\begin{array}{r} 2,584 \\ (9.8 \%) \end{array}$ | $\begin{array}{r} 2,542 \\ (9.7 \%) \end{array}$ | 26,282 |
| 2 | The people in this area can be trusted. | $\begin{array}{r} 2,199 \\ (8.4 \%) \end{array}$ | $\begin{array}{r} 9,192 \\ (35.1 \%) \end{array}$ | $\begin{array}{r} 10,521 \\ (40.2 \%) \end{array}$ | $\begin{array}{r} 2,267 \\ (8.7 \%) \end{array}$ | $\begin{array}{r} 2,015 \\ (7.7 \%) \end{array}$ | 26,194 |
| 3 | The people in this are greet each other. | $\begin{array}{r} 4,682 \\ (17.7 \%) \end{array}$ | $\begin{array}{r} 13,373 \\ (50.7 \%) \end{array}$ | $\begin{array}{r} 5,545 \\ (21.0 \%) \end{array}$ | $\begin{array}{r} 1,645 \\ (6.2 \%) \end{array}$ | $\begin{gathered} 1,141 \\ (4.3 \%) \end{gathered}$ | 26,386 |
| 4 | If there are issues in this area, people join forces in order to create a solution. | $\begin{array}{r} 2,631 \\ (10.1 \%) \end{array}$ | $\begin{array}{r} 9,415 \\ (36.0 \%) \end{array}$ | $9,788$ <br> (37.4\%) | $\begin{array}{r} 2,150 \\ (8.2 \%) \end{array}$ | $\begin{array}{r} 2,163 \\ (8.3 \%) \end{array}$ | 26,147 |

## 20. Awareness of health effects caused by radiation (Q20)

Awareness of health effects caused by radiation are shown in Table 28.

Table 28 Awareness of health effects caused by radiation
(Upper row is the number of individuals/lower row is ratio)

|  |  | Possibility <br> is very <br> low | $\longleftrightarrow$ | Possibility <br> is very <br> high | Number <br> of valid <br> responses |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1How much health disorders (for example, <br> cancer) do you think will occur in the <br> future due to the current radiation <br> exposure? | 6,607 | 7,235 | 4,953 | 4,391 | 23,186 |  |
| 2 | How much health disorders do you think <br> will occur in future generations (children | 4,992 | $(31.2 \%)$ | $(21.4 \%)$ | $(18.9 \%)$ |  |

FY 2013 Fukushima Health Management Survey

## Mental Health and Lifestyle Survey

Data

Data from the FY 2013 Mental Health and Lifestyle Survey for the age group 0-3


Q7 Sleep time and naps

| 1) Sleep time | $(1,227$ valid responses $)$ | - Average sleep hours: 10 h 0 min |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $(1,234$ valid responses $)$ | - Average sleep time: 9:11 PM |  |  |
|  | $(1,262$ valid responses $)$ | - Average wake-up time: 7:14 AM |  |  |
| 2$)$ Naps | $(1,272$ valid responses $)$ | - No | 181 | $14.2 \%$ |
|  |  | - Yes | 1,091 | $85.8 \%$ |
|  | $(870$ valid responses $)$ | (Average nap time 1 h 52 min |  |  |


( ) indicates included numbers

Data from the FY 2013 Mental Health and Lifestyle Survey for the age group 4-6

|  |  |  | Count | Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Gender <br> (average age 4.8) | (1,565 valid responses) | - Boys | 779 | 49.8\% |
|  |  | - Girls | 786 | 50.2\% |
| By address | (1,560 valid responses) | - Within the prefecture | 1,053 | 67.5\% |
|  |  | - Outside the prefecture | 507 | 32.5\% |
| Q1 Health condition | (1,532 valid responses) | - Very good | 404 | 26.4\% |
|  |  | - Good | 651 | 42.5\% |
|  |  | - Normal | 458 | 29.9\% |
|  |  | - Bad | 16 | 1.0\% |
|  |  | - Very bad | 3 | 0.2\% |
| Q2 Height and weight (by gender and age *Listed in the main document) |  |  |  | - |
| Q3 Currently treated diseases | (1,509 valid responses) | - No | 978 | 64.8\% |
|  |  | - Yes | 531 | 35.2\% |
|  | (breakdow | sted in the main document |  |  |
| Q4 Experience of hospitalization | (1,546 valid responses) | - No | 1,103 | 71.3\% |
|  |  | - Yes | 443 | 28.7\% |
|  | (breakdow | isted in the main document |  |  |
| Q5 Medical exam experience |  |  |  |  |
| 1) CT scan | (1,554 valid responses) | - No | 1,411 | 90.8\% |
|  |  | - Yes | 96 | 6.2\% |
|  |  | - I don't know | 47 | 3.0\% |
| 2) Exam using X-rays | (1,540 valid responses) | - No | 1,406 | 91.3\% |
|  |  | - Yes (*Examination contents) | 84 | 5.5\% |
|  |  | (fluoroscopy) | (65) | - |
|  |  | (angiography) | (9) | - |
|  |  | (nuclear medicine scan) | (2) | - |
|  |  | - I don't know | 50 | 3.2\% |
| Q6 Experience of radiation therapy | (1,553 valid responses) | - No | 1,509 | 97.2\% |
|  |  | - Yes | 14 | 0.9\% |
|  |  | - I don't know | 30 | 1.9\% |
| Q7 Sleep time and naps |  |  |  |  |
| 1) Sleep time | (1,493 valid responses) | - Average sleep hours: 9 h 46 min <br> - Average sleep time: 9:10 PM <br> - Average wake-up time: 7:02 AM |  |  |
|  | (1,503 valid responses) |  |  |  |
|  | (1,535 valid responses) |  |  |  |
| 2) Naps | (1,545 valid responses) | - No | 1,002 | 64.9\% |
|  |  | - Yes | 543 | 35.1\% |
|  | (427 valid responses) | (Average nap time 1h 39 m |  |  |


| Q8 Regular amount of exercise | (1,483 valid responses) | - Almost every day | 612 | 41.3\% |
| :---: | :---: | :---: | :---: | :---: |
|  |  | - 2-4 times a week | 465 | 31.4\% |
|  |  | - Once a week | 189 | 12.7\% |
|  |  | - Rarely | 217 | 14.6\% |
| Q9 Diet |  |  |  |  |
| Frequency of eating |  | - Listed in the main document |  |  |
| Q10 SDQ | (1,562 valid responses) | - Average total score 9.7 |  |  |
| 1) SDQ | (778 valid responses) <br> (784 valid responses) | - Male average total score 10.4 points <br> - Female average total score 9.0 points |  |  |
|  |  |  |  |  |
|  |  | - 16 points and above | 224 | 14.3\% |
|  |  | (male) | (125) |  |
|  |  | (female) | (99) | - |
|  |  | - 20 points and above | 89 | 5.7\% |
|  |  | (male) | (55) | - |
|  |  | (female) | (34) | - |
| 2) Presence or | (1,553 valid responses) | - No | 1,156 | 74.4\% |
| absence of |  | - Yes (slightly difficult) | 324 | 20.9\% |
| difficulties and |  | - Yes (clearly difficult) | 63 | 4.1\% |
| level |  | - Yes (critically difficult) | 10 | 0.6\% |
| 3) Level of upset | (383 valid responses) | - Not at all | 148 | 38.6\% |
|  |  | - A little | 211 | 55.1\% |
|  |  | - Very | 18 | 4.7\% |
|  |  | - Greatly | 6 | 1.6\% |

() indicates included numbers

Data from the Mental Health and Lifestyle Survey for elementary school students

|  |  |  | Count | Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Gender <br> (average age 9.4) | (3,001 valid responses) | - Boys | 1,528 | 50.9\% |
|  |  | - Girls | 1,473 | 49.1\% |
| Based on address | (2,995 valid responses) | - Within the prefecture | 2,130 | 71.1\% |
|  |  | - Outside the prefecture | 865 | 28.9\% |
| Q1 Health condition | (2,876 valid responses) | - Very good | 655 | 22.8\% |
|  |  | - Good | 1,275 | 44.3\% |
|  |  | - Normal | 906 | 31.5\% |
|  |  | - Bad | 34 | 1.2\% |
|  |  | - Very bad | 6 | 0.2\% |
| Q2 Height and weight (based on gender |  | ge *Listed in the main doc |  | - |
| Q3 Currently treated diseases | (2,867 valid responses) | - No | 1,881 | 65.6\% |
|  |  | - Yes | 986 | 34.4\% |
|  | (breakdow | sted in the main documen |  |  |
| Q4 Experience of hospitalization | (2,911 valid responses) | - No | 1,929 | 66.3\% |
|  |  | - Yes | 982 | 33.7\% |
|  | (breakdow | sted in the main document |  |  |
| Q5 Medical exam experience |  |  |  |  |
| 1) $C T$ scan | (2,975 valid responses) | - No | 2,470 | 83.0\% |
|  |  | - Yes | 368 | 12.4\% |
|  |  | - I don't know | 137 | 4.6\% |
| 2) Examination using X-rays | (2,933 valid responses) | - No | 2,606 | 88.9\% |
|  |  | - Yes (*Examination contents) | 176 | 6.0\% |
|  |  | (fluoroscopy) | (118) | - |
|  |  | (angiography) | (29) | - |
|  |  | (nuclear medicine scan) | (10) | - |
|  |  | - I don't know | 151 | 5.1\% |
| Q6 Experience of radiation therapy | (2,967 valid responses) | - No | 2,868 | 96.7\% |
|  |  | - Yes | 28 | 0.9\% |
|  |  | - I don't know | 71 | 2.4\% |
| Q7 Sleep time and naps |  |  |  |  |
| 1) Sleep time | (2,896 valid responses) | - Average sleep hours: 8 h 55 min <br> - Average sleep time: 9:29 PM <br> - Average wake-up time: 6:29 AM |  |  |
|  | (2,911 valid responses) |  |  |  |
|  | (2,970 valid responses) |  |  |  |
| Q8 Regular amount of | (2,829 valid responses) | - Almost every day <br> - 2-4 times a week | $\begin{gathered} 200 \\ 764 \end{gathered}$ | $\begin{gathered} 7.1 \% \\ 27.0 \% \end{gathered}$ |


( ) indicates included numbers

Data from the FY 2013 Mental Health and Lifestyle Survey for middle school students

|  |  |  | Count | Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Gender <br> (average age 13.8) | (1,348 valid responses) | - Boys | 663 | 49.2\% |
|  |  | - Girls | 685 | 50.8\% |
| By address | (1,344 valid responses) | - Within the | 1,031 | 76.7\% |
|  |  | prefecture |  |  |
|  |  | - Outside the | 313 | 23.3\% |
|  |  | prefecture |  |  |
| Q1 Health condition | (861 valid responses) | - Very good | 262 | 30.4\% |
|  |  | - Good | 264 | 30.7\% |
|  |  | - Normal | 310 | 36.0\% |
|  |  | - Bad | 23 | 2.7\% |
|  |  | - Very bad | 2 | 0.2\% |
| Q2 Height and weight (by gender and age |  | *Listed in the main document) |  | - |
| Q3 Sleep |  |  |  |  |
| 1) Sleep time <br> 2) (recent) sleep <br> for the past <br> month | (653 valid responses) | - Average sleep hours: 7 h 11 |  |  |
|  | (868 valid responses) | - Sufficient | 373 | 43.0\% |
|  |  | - Slightly insufficient | 400 | 46.1\% |
|  |  | - Insufficient | 95 | 10.9\% |
| Q4 Regular amount of exercise | (871 valid responses) | - Almost every day | 407 | 46.7\% |
|  |  | - 2-4 times a week | 124 | 14.2\% |
|  |  | - Once a week | 62 | 7.1\% |
|  |  | - Rarely | 278 | 31.9\% |
| Q5 Diet |  | - Listed in the main document |  | - |
| Q6 Experience at disaster | Multiple answers | - Earthquake | 823 | - |
|  |  | - Tsunami | 114 | - |
|  |  | - Nuclear power plant | 802 | - |
|  |  | accident |  |  |
|  |  | - Neither | 2 | - |
| Q7 Currently treated diseases | (1,293 valid responses) | - No | 942 | 72.9\% |
|  |  | - Yes | 351 | 27.1\% |
|  | (breakdown *Listed in th | e main document) |  |  |
| Q8 Experience of hospitalization | (1,293 valid responses) | - No | 837 | 64.7\% |
|  |  | - Yes | 456 | 35.3\% |
|  | (breakdown *Listed in th | e main document) |  |  |
| Q9 Medical exam experience |  |  |  |  |
| 1) $C T$ scan | (1,312 valid responses) | - No | 1,062 | 80.9\% |


() indicates included numbers

## Data from the Mental Health and Lifestyle Survey for the general public


responses)

| 2) (recent) sleep for the past | (23,241 valid responses) | - Sufficient | 9,163 | 39.4\% |
| :---: | :---: | :---: | :---: | :---: |
| month |  | - Slightly insufficient | 10,378 | 44.7\% |
|  |  | - Very insufficient | 3,048 | 13.1\% |
|  |  | - Greatly insufficient or couldn't get | 652 | 2.8\% |
|  |  | any sleep |  |  |
| 3) Experience related to sleep |  | -Listed in main document |  | - |
| Q8 Exercise | (27,104 valid | - Almost every day | 4,325 | 16.0\% |
|  | responses) | - 2-4 times a week | 6,467 | 23.9\% |
|  |  | - Once a week | 4,169 | 15.4\% |
|  |  | - Rarely | 12,143 | 44.8\% |
| Q9 Opportunity to laugh | (27,122 valid | - Every day | 7,057 | 26.0\% |
|  | responses) | - 1-5 times per week | 10.972 | 40.5\% |
|  |  | - 1-3 times per month | 5,371 | 19.8\% |
|  |  | - Rarely | 3,722 | 13.7\% |

( ) indicates included numbers

|  |  |  | Count | Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Q10 Smoking |  |  |  |  |
| 1)Second-hand smoking | (25,989 valid responses) | - Every day | 5,346 | 20.6\% |
|  |  | - 4-5 times per week | 1,621 | 6.2\% |
|  |  | - Sometimes | 7,283 | 28.0\% |
|  |  | - Rarely | 11,739 | 45.2\% |
| 2) Smoking (before disaster) | (25,211 valid responses) | - No | 17,783 | 70.5\% |
|  |  | - Yes | 7,428 | 29.5\% |
| 3) Smoking | (23,421 valid responses) | - No | 13,688 | 58.4\% |
|  |  | - I quit | 5,648 | 24.1\% |
|  |  | - I smoke | 4,085 | 17.4\% |
|  |  | (Average of 22.1 per day) |  | - |
|  |  | (Average smoking years 29.0 years) |  | - |
| Q11 Alcohol |  |  |  |  |
| 1) Alcohol consumption before disaster | (25,583 valid responses) | - No, or rarely | 13,530 | 52.9\% |
|  |  | - Yes (at least once a | 12,053 | 47.1\% |
|  |  | month) |  |  |
| 2) Alcohol consumption | (24,854 valid responses) | - No or rarely | 13,174 | 53.0\% |
|  |  | - I quit | 839 | 3.4\% |
|  |  | - Yes (at least once a | 10,841 | 43.6\% |
|  |  | month) |  |  |
|  | (type of alcohol and frequency *Listed in the main document) |  |  | - |
| 3) Frequency of consumption | (10,287 valid responses) | - Listed in the main document |  |  |
| 4) Daily alcohol consumption | (9,680 valid responses) | - Average 1 go |  |  |
| 5) Experiences <br> related to <br> alcohol | (9,962 valid responses) | - Listed in the main document |  | - |
| Q12 Diet | Multiple answers | - Listed in the main document |  |  |
| Q13 Mental health state (K6) 1) Mental health state (K6) |  |  |  |  |
|  | (22,836 valid responses) <br> (10,338 valid responses) <br> (12,498 valid responses) | - Average score 5.3 points |  |  |
|  |  | - Average male score 4.8 points |  |  |
|  |  | - Average female score 5.7 points |  |  |
|  |  | - 13 points and above | 2,349 | 10.3\% |
|  |  | (male) | (917) | - |
|  |  | (female) | $(1,432)$ | - |
|  | (by age group *Listed in the main document) |  |  | - |
| 2) Level of | (23,758 valid responses) | - None | 13,883 | 58.4\% |


| disabilities in daily life |  | - A little | 5,730 | 24.1\% |
| :---: | :---: | :---: | :---: | :---: |
|  |  | - Sometimes | 2,720 | 11.4\% |
|  |  | - Mostly | 642 | 2.7\% |
|  |  | - Always | 783 | 3.3\% |
| Q14 The Great East Japan Earthquake |  |  |  |  |
| 1) Disaster experience | Multiple answers | - Earthquake | 24,692 | - |
|  |  | - Tsunami | 4,655 |  |
|  |  | - Nuclear power plant | 24,623 | - |
|  |  | accident |  |  |
|  |  | - None | 239 | - |
| 2) | (25,076 valid responses) | - Yes | 15,282 | 60.9\% |
| Life-threatening experience |  | - No | 9,794 | 39.1\% |
| Q15 Traumatic |  |  |  |  |
| response (PCL) | (22,718 valid responses) | Average score 31.0 poin |  |  |
| 1) Traumatic response (PCL) | (10,249 valid responses) | Average male score 30.3 |  |  |
|  |  | points |  |  |
|  | (12,469 valid responses) | Average female score 3 |  |  |
|  |  | points |  |  |
|  |  | - 44 points and above | 3,899 | 17.2\% |
|  |  | (male) | $(1,625)$ |  |
|  |  | (female) | $(2,274)$ | - |
|  | (By age group *Listed in the main document) |  |  | - |
| 2) Difficulties in | (22,889 valid responses) | - Yes | 5,360 | 23.4\% |
| daily life |  | - No | 17,529 | 76.6\% |
| Q16 Difficulties |  |  |  |  |
| in daily life |  | - Frequently | 1,039 | 19.9\% |
| (PCL) | (5,219 valid responses) | - Sometimes | 2,485 | 47.6\% |
| 1) Frequency of |  | - Rarely | 1,310 | 25.1\% |
| difficulties in |  | - Never | 385 | 7.4\% |
| daily life |  |  |  |  |
| 2) Difficulties at | (4,359 valid responses) | - None | 165 | 3.8\% |
| work/school |  | - Slight | 1,945 | 44.6\% |
|  |  | - Moderate | 1,509 | 34.6\% |
|  |  | - Severe | 418 | 9.6\% |
|  |  | - Very severe | 322 | 7.4\% |
| 3) Difficulties in social life | (4,479 valid responses) | - None | 207 | 4.6\% |
|  |  | - Slight | 1,815 | 40.5\% |
|  |  | - Moderate | 1,612 | 36.0\% |



| employment |  | - Part-time <br> - Unemployed (including students and homemakers) | $\begin{array}{r} 1,964 \\ 17,321 \end{array}$ | $\begin{array}{r} 7.6 \% \\ 67.3 \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| 6) Work | (22,723 valid responses) | - It changed | 11,455 | 50.4\% |
| situation | Multiple answers | - It didn't change | 11,268 | 49.6\% |
| 7) Work changes |  | - Started a new job | 1,318 |  |
|  |  | - Lost a job | 5,829 |  |
|  |  | - Changed jobs | 1,434 | - |
|  |  | - Position change | 1,506 |  |
|  |  | - Other | 2,007 | - |
| 8) Current | (24,875 valid responses) | - Tough | 3,569 | 14,3\% |
| financial |  | - Slightly tough | 6,350 | 25,5\% |
| circumstances |  | - Normal | 13,736 | 55.2\% |
|  |  | - Slightly comfortable | 919 | 3.7\% |
|  |  | - Comfortable | 301 | 1.2\% |
| Q18 Human | (23,886 valid responses) | - Average score |  |  |
| relations | (10,644 valid responses) | 12.9 points |  |  |
| (LSNS-6) | ( 13,242 valid responses) | - Male average score |  |  |
|  |  | 12.6 points |  |  |
|  |  | - Female average score 13.2 points |  |  |
|  |  | - Less than 12 points | 9,727 | 40.7\% |
|  |  | (Male) | $(4,614)$ |  |
|  |  | (Female) | $(5,113)$ |  |
|  |  | (By age group *Listed in the main document) |  |  |
| Q19 Currently residing area |  | - Listed in the main document |  |  |
| Q20 Health |  | - Listed in the main |  |  |
| effects of |  | document |  |  |
| radiation |  |  |  |  |
| Q21-24 |  | - Omitted |  |  |

() indicates included numbers

# Fukushima Health Management Survey 

 Mental Health and Lifestyle Survey Questionnaire (For ages0-3)```
〒963-0000
```

Room 302, Idai Apartment
1, Hikarigaoka, Fukushima city

## Mr. Taro Idai

Enter the required items in the fields below. Please check $\checkmark$ in corresponding boxes $\square$.

Date of entry : MM/DD/2015

| Child's name : | Sex: ${ }_{1} \square \mathrm{M} \quad{ }_{2} \square \mathrm{~F}$ |
| :--- | :--- |
| Child's date of birth : MM/DD/YYYY |  |



Fukushima Prefecture, Fukushima Medical University

Please check $\checkmark$ in the corresponding small boxes $\square$ below.
Q1. Describe your child's current health condition.
$\square$ Very good
${ }_{2} \square$ Good
Normal
Bad
Very bad

Q2. Please enter your child's current height and weight.
Example: Height 89.9 cm weight 12.6 kg (enter values right justified)

$$
\text { Height }: 8.9 .9 \mathrm{~cm} \text { Weight } \begin{array}{|c:c}
1 & 2.6 \\
\mathrm{~kg}
\end{array}
$$

Height


Q3. Is your child currently receiving treatment for (a) disease(s), etc.?



Q4. Has your child been hospitalized due to an illness within this year?


Q5. Below are questions regarding your child's sleeping habits

1) When does your child regularly sleep or wake up?
(Enter right justified based on 24-hour clock.


Bedtime


Time to wake up
 $\min$
2) Does your child take naps?
${ }_{1} \square$ No
${ }_{2} \square$ Yes
$\longrightarrow$ About
h


Q6. Below are questions for guardians who have a child aged 2 years or younger. How much does your child exercise?
(Running around indoors, kicking balls, riding tricycles, etc.)
${ }_{1} \square$ Almost every dayAround 2-4 times per week
$\square$ Once a week
Almost never

Q7. Below are questions regarding your child's diet.

1) Does your child drink breast milk?
${ }_{1} \square$ Yes
${ }_{2} \square$ No
2) Below are questions for guardians who have a child aged one year old or more . Please check $\checkmark$ in corresponding boxes $\square$ regarding your child's past month d iet.
(1) Does your child eat seafood 3 days or more per week? $\cdots \ldots \ldots \ldots \omega_{1} \square$ Yes ${ }_{2} \square$ No
(2) Does your child eat food such as vegetables other than pickles, seaweed or mushrooms almost every day? $\cdots \cdots{ }_{1} \square$ Yes ${ }_{2} \square$ No
 ${ }_{2} \square$ No
(4) Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day? $\cdot{ }_{1} \square$ Yes ${ }_{2} \square$ No
(5) Does your child eat dairy products (milk, yogurt, etc.) almost every day?

Yes ${ }_{2} \square$ No
Q8. Are there ever times when you doubt your ability to raise a child?Yes
${ }_{2} \square$ NoCannot say
※ If you have concerns regarding your child＇s health or comments regarding this survey，please describe them below．
Your comments will be used for references for future health management and surveys．


That is it for the questions．
Please enclose the questionnaire in a return envelope and send it by mail． Thank you for your cooperation．

〔Contact〕
O Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center，Fukushima Medical University

Phone number：024－549－5170
（9：00－17：00（with the exception of Dec 29－Jan 3 and weekends／holidays））

# Fukushima Health Management Survey 

 Mental Health and Lifestyle Survey Questionnaire (For ages 4-6)

Enter the required items in the fields below. Please check $\checkmark$ in corresponding boxesa.

| Child's name : | Sex: ${ }_{1 \square} \mathrm{M} \quad{ }_{2} \square \mathrm{~F}$ |
| :--- | :--- |
| Child's DOB : MM/DD/YYYY |  |



Fukushima Prefecture, Fukushima Medical University

Please check $\checkmark$ in the corresponding small boxes $\square$ below.
Q1. Describe your child's current health condition.
${ }_{1} \square$ Very good $\quad{ }_{2} \square$ Good $\quad{ }_{3} \square$ Normal ${ }_{4} \square$ Bad
Very bad
Q2. Please enter your child's current height and weight.
Example : Height 89.9 cm , weight 12.6 kg (enter values right justified)

$$
\text { Height } 1: 1: 6.6 \mathrm{~cm} \text { Weight } \quad 2: 1.3 \mathrm{~kg}
$$



Q3. Is your child currently receiving treatment for (a) disease(s), etc.?
No Yes

If so, please check $\checkmark$ in the corresponding boxes $\square$.


Q4. Has your child been hospitalized due to an illness within this year?
No $\qquad$
If so, please check $\checkmark$ in the corresponding boxes $\square$.


Q5. Below are questions regarding your child's sleeping habits.

1) When does your child regularly sleep or wake up?
$\left(\begin{array}{lllll}\text { Enter right justified based on } & \text { 24-hour clock. } & & \\ (\text { Ex }) 7: 10 \mathrm{PM} \rightarrow & 1: 9 & \square 10 & 7: 10 \mathrm{AM} \rightarrow & \boxed{1} \\ \hline 10\end{array}\right)$

Bedtime $\quad \mathrm{h} \quad \mathrm{m}$ in $\quad$ Time to wake up $\quad \mathrm{h} \square \mathrm{am}$
2) Does your child take naps?No
$\square$ Yes
$\longrightarrow$ About $\square$ h


Q6. Below are questions for guardians who have a child aged 2 years or younger. How much does your child exercise?
(Running around indoors, kicking balls, riding tricycles, etc.)
${ }_{1} \square$ Almost every day ${ }_{2} \square$ Around 2-4 times per week
${ }_{3} \square$ Once a week ${ }_{4} \square$ Almost never

Q7. Please check $\checkmark$ in the corresponding boxes $\square$ below regarding your child's diet during the past month.

1) Does your child eat fast compared to others? $\cdots \cdots \cdots \quad{ }_{1} \square$ Fast $\quad{ }_{2} \square$ Normal ${ }_{3} \square$ Slow
2) Does your child drink beverages containing sugar (juice, soft drinks) every day? $\cdots{ }_{1}{ }_{\square}$ Yes ${ }_{2} \square$ No
3) Does your child eat seafood 3 days or more per week?Yes No
4) Does your child eat food such as vegetables other than pickles, seaweed or mushrooms almost every day? $\cdots \cdots{ }_{1} \square$ Yes ${ }_{2} \square$ No
5) Does your child eat fruits almost every day?Yes No
6) Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day? $\cdot{ }_{1} \square$ Yes ${ }_{2} \square$ No
7) Does your child eat dairy products (milk, yogurt, etc.) almost every day?
${ }_{1} \square$ Yes ${ }_{2} \square$ No
8) Does your child eat pre-cooked food such as side dishes and boxed meal (including instant food) almost every day? ............................................. $\quad{ }_{1} \square$ Yes ${ }_{2} \square$ No
9) Does your child eat out (including fast food) almost every day?Yes $\qquad$ No

## Q8. For each question item below, please check the box "Does not apply",

 "Somewhat applies" or "Applies" (Ex: $\begin{aligned} & \\ & )\end{aligned}$. Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.1) Please describe your child's behavior in the past 6 months.

| Does not <br> apply | Somewhat <br> applies | Applies |
| :---: | :---: | :---: |

1 My child is often considerate towards feelings of others.
2 My child is restless and can't stay put for a long period of time.
3 My child often complains of headaches, stomachaches and feeling sick.

4 My child often shares things (snacks, toys, pencils, etc.) with other children.
5 My child often gets angry or loses his/her temper.
6 My child likes being alone and often plays alone.
7 My child is obedient and usually listens to adults.
8 My child has many concerns and always seems nervous.
9 My child proactively helps others if somebody is hurt, depressed or harassed.

10 My child is always restless and fidgets often.
11 My child has at least one close friend.
12 My child has fights with or bullies other children often.
13 My child often feels down or has tears in his/her eyes.
14 My child is mostly liked by other children.
15 My child has difficulty paying attention and cannot focus on one thing.
16 My child easily loses confidence, gets nervous, and hangs on my arm when he or she is confronted with a new situation.
17 My child is kind to younger children.
18 My child often covers up the truth or lies.
19 My child has been bullied or made fun of by other children.
20 My child often helps others (parents, teachers, other children, etc.) proactively.

21 My child thinks thoroughly before taking action.
22 My child often steals from home, school, and others.
23 My child seems more comfortable with adults than spending time with other children.

24 My child is a coward and gets scared easily.
25 My child finishes tasks to the end and has good focus.
2) Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?
${ }_{1} \square$ No $\quad{ }_{2} \square$ Yes (small issues)
${ }_{3} \square$ Yes (clear issues) Yes (serious issues)

3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues?Not at allJust a littleVery $\quad{ }_{4} \square$ Greatly

Q9. Does your child ever refuse to go to nursery school or kindergarten?YesNoMy child is currently not enrolled in nursery school or kindergarten.
※ If you have any concerns regarding your child's health or comments regarding this survey, please describe them below.
Your comments will be used for references for future health management and surveys.

That is it for the questions.
Please enclose the questionnaire in a return envelope and sent it by mail.
Thank you for your cooperation.

Please answer the questionnaire regarding the basic survey as well.
Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your child's basic survey questionnaire (the record of your child's behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).Yes


Below are questions for those who answered "No" or "I don't know" above.
Can we resend your child's basic survey questionnaire?Yes

```No
```

〔Contact〕
$\bigcirc \circ$ Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center，Fukushima Medical University
Phone number：024－549－5170
（9：00－17：00（with the exception of Dec 29－Jan 3 and weekends／holidays））

## (Draft)

## Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire (For elementary school students)



Enter the required items in the fields below.
Please check $\checkmark$ in corresponding boxesa.
Date of entry : MM/DD/2015

Child's name :
Sex :

Child's DOB: MM/DD/YYYY

| Who will respond to the survey? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ${ }_{1} \square$ Mother | ${ }_{2} \square$ Father | ) | ${ }_{3} \square$ Grandparents | ${ }_{4} \square$ Other |
| Signature <br> (Relationship | of |  | guardian |  |
| (Change of mailing address) Please enter if your mailing address differs from the address mentioned above. |  |  |  |  |
|  |  | City, ward, county | Ward, town, village |  |

Name of apartment/room number etc.

```
Contact information
Phone number ※The mental health support team may contact you
Home:( ) - (Name )
Cell :
```

Fukushima Prefecture Fukushima Medical University

Please check $\checkmark$ in the corresponding small boxes $\square$ below.
Q1. Describe your child's current health condition.Very good
${ }_{2} \square$ Good
Normal
Bad

Very bad
Q2. Please enter your child's current height and weight.
Example : Height 145.0 cm , weight 38.0 kg (enter values right justified


Q3. Is your child currently receiving treatment for (a) disease(s), etc.?
${ }_{1} \square$ No $\quad{ }_{2} \square$ Yes
If so, please check $\checkmark$ in the corresponding boxes $\square$.


Q4. Has your child been hospitalized due to an illness within this year?


If so, please check $\checkmark$ in the corresponding boxes $\square$.


Q5. When does your child regularly go to sleep and wake up?


Bedtime

$\min$

Q6. How much does your child exercise regularly aside from physical education classes (club activities, sport-related lessons, etc.)?

Almost every day ${ }_{2} \square$ Around 2-4 times per weekOnce a week $\quad \llbracket$ Almost never

Q7. Please check $\checkmark$ in the corresponding boxes $\square$ below regarding your child's diet during the past month.

1) Does your child eat fast compared to others? $\cdots \ldots \ldots{ }_{1 \square} \square$ Fast $\quad{ }_{2} \square$ Normal ${ }_{3} \square$ Slow

2) Does your child drink beverages containing sugar (juice, soft drinks) every day?.... Yes ${ }_{2} \square$ No
3) Does your child eat seafood 3 days or more per week? $\ldots \ldots \ldots \ldots \omega_{1} \square$ Yes $_{2} \square$ No
4) Does your child eat food such as vegetables other than pickles, seaweed or mushrooms almost every day? $\cdots{ }_{\square} \square$ Yes $\quad{ }_{2} \square$ No
5) Does your child eat fruits almost every day? $\qquad$Yes No
6) Does your child eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day? $\cdot{ }_{1} \square$ Yes ${ }_{2} \square$ No
7) Does your child eat dairy products (milk, yogurt, etc.) almost every day?
${ }_{1} \square$ Yes ${ }_{2} \square$ No
8) Does your child eat pre-cooked food such as side dishes and boxed meal (including instant

9) Does your child eat out (including fast food) almost every day? . . . . . . . . $\quad$ Yes No

## Q8. For each question item below, please check the box "Does not apply", "Somewhat applies" or "Applies" (Ex: $\boxtimes$ ). Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.

1) Please describe your child's behavior in the past 6 months.

|  | Not <br> applicable | Somewhat <br> applicable | Applicable |  |
| :--- | :--- | :---: | :---: | :---: |
| 1 | My child is often considerate towards feelings of others. | $\square$ | $\square$ | $\square$ |
| 2 | My child is restless and can't stay put for a long period of time. | $\square$ | $\square$ | $\square$ |
| 3 | My child often complains of headaches, stomachaches and feeling | $\square$ | $\square$ | $\square$ |
| $\quad$ sick. |  |  |  |  |
| 4 | My child often shares things (snacks, toys, pencils, etc.) with other | $\square$ | $\square$ | $\square$ |
| $\quad$ children. |  |  |  |  |
| 5 | My child often gets angry or loses his/her temper. | $\square$ | $\square$ | $\square$ |
| 6 | My child likes being alone and often plays alone. | $\square$ | $\square$ | $\square$ |
| 7 | My child is obedient and usually listens to adults. | $\square$ | $\square$ | $\square$ |
| 8 | My child has many concerns and always seems nervous. | $\square$ | $\square$ | $\square$ |

9 My child proactively helps others if somebody is hurt, depressed or harassed.
10 My child is always restless and fidgets often.
11 My child has at least one close friend.
12 My child has fights with or bullies other children often.
13 My child often feels down or has tears in his/her eyes.
14 My child is mostly liked by other children.
15 My child has difficulty paying attention and cannot focus on one thing.
16 My child easily loses confidence, gets nervous, and hangs on my arm when he or she is confronted with a new situation.

17 My child is kind to younger children.
18 My child often covers up the truth or lies.
19 My child has been bullied or made fun of by other children.
20 My child often helps others (parents, teachers, other children, etc.) proactively.
21 My child thinks thoroughly before taking action.
22 My child often steals from home, school, and others.
23 My child seems more comfortable with adults than spending time with other children.

24 My child is a coward and gets scared easily.
2)Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?
${ }_{1} \square$ No $\quad{ }_{2} \square$ Yes (small issues)
${ }_{3} \square$ Yes (clear issues)
Yes (serious issues)

Please proceed to 3)
3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues?Not at allJust a littleVery
${ }_{4} \square$ Greatly

Q9. Does your child ever refuse to go to school?YesNo
※ If you have any concerns regarding your child's health or comments regarding this survey, please describe them below.
Your comments will be used for references for future health management and surveys.

That is it for the questions.
Please enclose the questionnaire in a return envelope and send it by mail.

Thank you for your cooperation.

Please answer the questionnaire regarding the basic survey as well.
Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your child's basic survey questionnaire (the record of your child's behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).Yes


Below are questions for those who answered "No" or "I don't know" above.
Can we resend your child's basic survey questionnaire?Yes
${ }_{2} \square$ No
[Contact〕
O © Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center, Fukushima Medical University
Phone number: 024-549-5170
( $9: 00-17: 00$ (with the exception of Dec 29-Jan 3 and weekends/holidays))

Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire (For middle school students)

| Signature of guardian (If you are a minor responding to this survey, please have your guardian sign <br> for this study upon consent.) <br> (Signature of guardian) |
| :--- |
| (Change of mailing address) <br> mentioned above. |
| (Relationship : Please enter if your mailing address differs from the address |
| Name of apartment/room number etc. |

Fukushima Prefecture, Fukushima Medical University

Please check $\checkmark$ in the corresponding small boxes $\square$ below.

## For questions 1-5, please have your child answer in person.

```
Respondent:, }\square\mathrm{ Self
On behalf (Relationship
```

$\qquad$

``` )
```

Q1. How is you current health condition?
Very goodGood

Normal Bad
${ }_{5} \square$ Very bad

Q2. Please enter your current height and weight.
Example : Height 159.6 cm , weight $54.2 \mathrm{~kg}($ enter values right justified)



Q3. Below are questions regarding your sleeping habits.

1) What are your usual average hours of sleep (including naps) per day?

Around $\square$ h $\square$
2) Do you think your daily hours of sleep are sufficient?SufficientNot quite sufficientNot sufficient

Q4. How much do you exercise aside from physical education classes?
(Including club activities, sport-related lessons, etc.)Almost every day2-4 times per weekOnce a weekAlmost never

Q5. Check $\checkmark$ in the boxes $\square$ below that correspond to your diet during the past month.

1) Do you eat fast compared to others? $\cdots \cdots \cdots \quad \square$ Fast $\quad{ }_{2} \square$ Normal $\quad{ }_{3} \square$ Slow

2) Do you go to sleep within $1-2$ hours after dinner? $\cdots \cdots \cdots \cdots{ }_{1} \quad$ Yes $\quad{ }_{2} \square$ No
3) Do you drink beverages that contain sugar (coffee, juice, soft drinks) almost every day?.
${ }_{1} \square$ Yes $\quad{ }_{2}$ No
5)) Do you eat seafood 3 days or more per week? Yes ${ }_{2} \square$ No
4) Do you eat foods such as vegetables other than pickles, seaweed, and mushrooms? $\cdots \cdots{ }_{\square} \square$ Yes $\quad \square$ No
5) Do you eat fruits almost every day? $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots{ }_{\square}$ Yes $\quad{ }_{2} \square$ No
6) Do you eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day?. - ${ }_{1} \square$ Yes ${ }_{2} \square$ No
7) Do you eat dairy products (milk, yogurt, etc.) almost every day? $\cdots \cdots \omega_{1} \square$ Yes ${ }_{2} \square$ No
10)Do you eat pre-cooked food such as side dishes and boxed meal (including instant food) almost every day?
$\qquad$
8) Do you eat out (including fast food) almost every day? YesNo
※ If you have any concerns regarding your health or comments regarding this survey, please describe them below. Your comments will be used for references for future health management and surveys.

That is it for the questions to you. Please give this questionnaire to your guardian. Thank you for your cooperation.

For the questions below, the guardian must respond on the child's behalf.

Q6. Is your child currently receiving treatment for (a) disease(s), etc.?


Q7. Has your child been hospitalized due to an illness within this year?


Q8. For each question item below, please check the box "Does not apply", "Somewhat applies" or "Applies" (Ex: $\nabla$ ). Even if you are unsure of your answer, or if you think the question is absurd, please make sure to answer all questions.

1) Please describe your child's behavior in the past 6 months.

|  | Does not <br> apply | Somewhat <br> applies | Applies |  |
| :--- | :--- | :---: | :---: | :---: |
| 1 | My child is often considerate towards feelings of others. | $\square$ | $\square$ | $\square$ |
| 2 | My child is restless and can't stay put for a long period of time. | $\square$ | $\square$ | $\square$ |
| 3 | My child often complains of headaches, stomachaches and feeling | $\square$ | $\square$ | $\square$ |
|  | sick. |  |  |  |
| 4 | My child often shares things (snacks, toys, pencils, etc.) with other | $\square$ | $\square$ | $\square$ |
|  | children. |  |  |  |
| 5 | My child often gets angry or loses his/her temper. | $\square$ | $\square$ | $\square$ |
| 6 | My child likes being alone and often plays alone. | $\square$ | $\square$ | $\square$ |
| 7 | My child is obedient and usually listens to adults. | $\square$ | $\square$ | $\square$ |
| 8 | My child has many concerns and always seems nervous. | $\square$ | $\square$ | $\square$ |
| 9 | My child proactively helps others if somebody is hurt, depressed | $\square$ | $\square$ | $\square$ |
|  | or harassed. | $\square$ | $\square$ | $\square$ |
| 10 | My child is always restless and fidgets often. | $\square$ | $\square$ | $\square$ |
| 11 | My child has at least one close friend. | $\square$ | $\square$ | $\square$ |
| 12 | My child has fights with or bullies other children often. | $\square$ | $\square$ | $\square$ |
| 13 | My child often feels down or has tears in his/her eyes. | $\square$ | $\square$ | $\square$ |
| 14 | My child is mostly liked by other children. | $\square$ | $\square$ | $\square$ |
| 15 | My child has difficulty paying attention and cannot focus on one | $\square$ | $\square$ | $\square$ |
|  | thing. | $\square$ | $\square$ | $\square$ |
| 16 | My child easily loses confidence, gets nervous, and hangs on my | $\square$ | $\square$ |  |

17 My child is kind to younger children.
18 My child often covers up the truth or lies.
19 My child has been bullied or made fun of by other children.
20 My child often helps others (parents, teachers, other children, etc.) proactively.
21 My child thinks thoroughly before taking action.
22 My child often steals from home, school, and others.
23 My child seems more comfortable with adults than spending time with other children.
24 My child is a coward and gets scared easily.
25 My child finishes tasks to the end and has good focus.
2) Overall, do you think your child has any issues in one or more of the following areas: emotions, paying attention, behaviors or relationships with others?
issues) ${ }_{1} \square$ No $\quad{ }_{2} \square$ Yes (small issues) $\quad{ }_{3} \square$ Yes (clear issues) $\quad{ }_{4} \square$ Yes (serious

Please proceed to 3)
3) Below are questions for guardians who responded "yes" above. Does your child worry or become upset about these issues? ${ }_{1} \square$ Not at all $\quad{ }_{2} \square$ Just a little $\quad{ }_{3} \square$ Very $\quad{ }_{4} \square$ Greatly

Q9. Does your child ever refuse to go to school?YesNo
※ If you have any concerns regarding your child's health or comments regarding this survey, please describe them below.
Your comments will be used for references for future health management and surveys.
$\square$

That is it for the questions. Please enclose the survey in a return envelope and send it by mail.

Thank you for your cooperation.

Please answer the questionnaire regarding the basic survey as well.
Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your child's basic survey questionnaire (the record of your child's behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you or your child).


Below are questions for those who answered "No" or "I don't know" above.
Can we resend your child's basic survey questionnaire?Yes
${ }_{2} \square$ No

## 〔Contact〕

O © Exclusively for the Mental Health and Lifestyle Survey

Future
From
Fukushima
ふくしまから はじめよう。 Radiation Medical Science Center，Fukushima Medical University
Phone number：024－549－5170
（9：00－17：00（with the exception of Dec 29－Jan 3 and weekends／holidays））

# Fukushima Health Management Survey Mental Health and Lifestyle Survey Questionnaire (For the general public) 



Enter the required items in the fields below. Please check $\sqrt{ }$ in corresponding boxes $\square$.

| Date of entry : MM/DD/2015 | Respondent : ${ }_{1} \square$ Self ${ }_{2} \square$ Representative <br> (Relationship ) |  |  |
| :---: | :---: | :---: | :---: |
| Name : $\quad$ Sex: ${ }_{1} \square \mathrm{M} \quad{ }_{2} \square \mathrm{~F}$ |  |  |  |
| DOB : MM/DD/YYYY |  |  |  |
| Signature of guardian (If you are a minor responding to this survey, please have your guardian sign for this study upon consent.) <br> (Signature of guardian) <br> (Relationship: ) |  |  |  |
| (Change of mailing address)mentioned above. Please enter if your mailing address differs fro |  |  |  |
| Name of apartment/room number etc. |  |  |  |
| Contact information <br> Phone number ※The mental health support team may contact you. |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Home : $($ $)$ -  <br> Cell : - - (Name |  |  |  |

## Fukushima Prefecture, Fukushima Medical University

Please check $\checkmark$ in the corresponding small boxes $\square$ below.
Q1. How is you current health condition?Very good
${ }_{2} \square$ Good
Normal
${ }_{4} \square$ BadVery bad

Q2. Please enter your current height and weight.
Example: Height 171.7 cm Weight 70.0 kg


1) Please enter your current height and weight.


Height cm

Weight kg (Right justified)
2) Has there been any changes in your body weight compared to one year ago? ${ }_{1} \square$ Increased by 3 kg or more ${ }_{2} \square$ Almost no change (within $\pm 3 \mathrm{~kg}$ ) ${ }_{3} \square$ Decreased by 3 kg or more

Q3. Have you been diagnosed with any of the diseases below within the past year?

1) High blood pressureNo $\quad \square$ Yes

Are you currently attending a hospital as outpatient?No
2) Diabetes (high blood-sugar level)No ${ }_{2} \square$ Yes
Are you currently attending a hospital as outpatient? Yes No
3) Hyperlipidaemia (or has highNoYes
4) Mental disorder (diagnosed by a doctor (Ex: depression, sleep disorder, panic disorder, schizophrenia))No ${ }_{2} \square$ Yes

Are you currently attending a hospital as outpatient? Yes
$\square$ Not any more since I have improved No
5) Cancer (including leukemia and lymphoma)
${ }_{1} \square$
No
${ }_{2} \square$
Yes

7) Heart disease
No Yes
9) FractureNo
Yes
10) Thyroid disease
${ }_{1} \square$ No ${ }_{2} \square$ Yes


Q4. Below are questions regarding your sleeping habits.

1) (Including naps) what are your usual average hours of sleep per day?

2) Are you satisfied with your quality of sleep (regardless of the length) during the past month?
$\square$ Yes ${ }_{2} \square$ Not quite ${ }_{3} \square$ No ${ }_{4} \square$ Not at all, I didn't get any sleep
3) Have you experienced the items below at least 3 times a week?

|  | Yes |  |  |  | No |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 1 | It takes time for me to fall asleep, even after I'm in bed | $1 \square$ | ${ }_{2} \square$ |  |  |
| 2 | I wake up during the night in the middle of sleep | ${ }_{1} \square$ | ${ }_{2} \square$ |  |  |
| 3 | I wake up before the time I set and can't go back to <br> sleep. | ${ }_{1} \square$ | ${ }_{2} \square$ |  |  |
| 4 | I don't get enough total sleep. | $1 \square$ | ${ }_{2} \square$ |  |  |
| 5 | I feel tired during the day. | ${ }_{1} \square$ | ${ }_{2} \square$ |  |  |


| 6 | My daily physical and mental activity levels are low. | ${ }_{1} \square$ | ${ }_{2} \square$ |
| :---: | :--- | :---: | :---: |
| 7 | I feel sleepy during the day. | ${ }_{1} \square$ | ${ }_{2} \square$ |

## Q5. Do you exercise regularly?

Almost every day $\quad{ }_{2} \square$ 2-4 times per week
Once a week ${ }_{4} \square$ Almost never
※ Questions 6 and 7 target adults only.
If you are a minor, proceed to Q8.
Q6. Do you smoke tobacco (cigarettes)? These do not include cigars or pipes.


Q7. The questions below are regarding alcohol.

1) Do you currently drink alcohol?

2) How often do you drink alcohol?

Around $\square$ days per week

| Beer/Sparkling liquor middle bottle |  | About | $500 \mathrm{~m}$ |
| :---: | :---: | :---: | :---: |
| 5 Shochu highballs can | 1 long |  | $500 \mathrm{~m}$ |
| 25\% shochu $\quad 1$ | 1 cup |  |  |
| Whisky 2 | 2 singles |  | 60 ml |
| Wine 2 | 2 glasses |  | 240 m |

3) Please tell us your alcohol intake per day.

Amount converted to Japanese sake*
Around
 go per day
4) The questions below are regarding your past 30 days.

|  | No |  | Yes |
| :---: | :--- | :---: | :---: |
| 1 | Have you ever thought that you should cut down your alcohol <br> intake? | ${ }_{1} \square$ | ${ }_{2} \square$ |
| 2 | Have you ever been annoyed by others criticizing your drinking <br> habits? | ${ }_{1} \square$ | ${ }_{2} \square$ |
| 3 | Have you ever felt bad or sorry for your drinking habits? | ${ }_{1} \square$ | ${ }_{2} \square$ |
| 4 | Have you had a hair of the dog in order to calm your senses or to <br> cure a hangover? | ${ }_{1} \square$ | ${ }_{2} \square$ |

Q8. How frequently have you lost your appetite during the past two weeks?
${ }_{1} \square$ Never
Several days
At least half of the time
${ }_{4} \square$ Almost every day

Q9. Check $\boldsymbol{\checkmark}$ in the boxes $\square$ below that correspond to your dietary habits during the past month.

1) Do you eat fast compared to others? $\cdots \cdots \cdots{ }_{1} \square$ Fast ${ }_{2} \square$ Normal ${ }_{3} \square$ Slow

2) Do you end up eating until you are full? $\ldots \ldots \ldots \ldots \ldots \ldots{ }_{1}$ Yes $\quad{ }_{2} \square$ No
3) Do you eat snacks during the day or night every day?

Yes ${ }_{2} \square$ No
5) Do you eat kinds of meat with a large amount of fat (ribs, ground meat, loins, processed meat) at least 3 days per week?

Yes ${ }_{2} \square$ No
6) Do you eat seafood at least 3 days per week?
7) Do you have soup (including miso soup, etc.) at least 2 bowls a day?

Yes ${ }_{2} \square$ No
8) Do you eat pickles at least twice a day?Yes
9) Do you eat vegetables other than pickles, seaweed, and mushrooms for almost every meal? $\qquad$No
10) Do you eat fruits almost every day?Yes
${ }_{2} \square$ No
11) Do you eat soy products (Tofu, deep fried tofu, natto, boiled beans, etc.) almost every day? $\cdot$
${ }_{1} \square$ YesNo
12) Do you eat dairy products (milk, yogurt, etc.) almost every day?Yes
${ }_{2} \square$ No
13) Do you eat pre-cooked food such as side dishes and boxed meal (including instant food)
almost every day? . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
14) Do you eat out (including fast food) almost every day?YesNo

Q10. For the past 30 days, how often did you experience the items below?
Please circle the corresponding numbers.

|  |  | Never | A little | Some- <br> times | Most <br> of the <br> time | Always |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | Have you been hypersensitive? | 0 | 1 | 2 | 3 | 4 |
| 2 | Have you been in despair? | 0 | 1 | 2 | 3 | 4 |
| 3 | Have you been restless? | 0 | 1 | 2 | 3 | 4 |
| 4 | Have you felt down to the point where <br> nothing can cheer you up? | 0 | 1 | 2 | 3 | 4 |
| 5 | Did you feel lethargic to do anything? | 0 | 1 | 2 | 3 | 4 |
| 6 | Did you feel like you were worthless? | 0 | 1 | 2 | 3 | 4 |
| 7 | Due to such conditions, have you even <br> experienced inconveniences in your daily <br> life? | 0 | 1 | 2 | 3 | 4 |

Q11. Below are questions regarding your daily living condition.

1) Are you currently living away from your family because of the earthquake disaster?
2) Please indicate the number of people you are currently living with (including yourself).
Before the earthquake disaster () At present )
3) Where do you currently live? Check $\sqrt{ }$ in the corresponding boxes below.Municipally subsidized rental housing ${ }_{2} \square$ Temporary housing $\quad 3 \square$ Restoration public housing ${ }_{4} \square$ Rented house/Apartment $\quad{ }_{5} \square$ Relative's house
4) Please tell us your current working hours.
```
Full-time/self-employed }\mp@subsup{}{2}{}\square\mathrm{ Part-time }\mp@subsup{}{3}{\square}\square\mathrm{ Unemployed (Including students and housewives)
```

5) How do you feel about your current living condition economically?
${ }_{1} \square$ Tough $\quad{ }_{2} \square$ Slightly tough $\quad{ }_{3} \square$ Normal ${ }_{4} \square$ Slightly comfortable ${ }_{5} \square$ Comfortable
6) Were you (or your spouse) pregnant before the earthquake disaster? Also, were you living together with your child who is underage? (Multiple answers possible)No Yes
$\uparrow$

7) Are you (or your spouse) currently pregnant? Or are you currently living with your child who is underage? (Multiple answers possible)No
Yes
1 ${ }^{\square} \mathrm{I}$ am (or my spouse) is currently pregnant.
I live with my preschool or younger child.
I live with my elementary school child.
I live with my middle school child.
I live with my underage child who has at least graduated from middle school.

Q12. Below are questions regarding radiation.

1) Below are questions regarding your awareness on the health effects of radiation. Please circle the corresponding number.

|  |  | The <br> possibilities <br> are very low |  | The <br> possibilities <br> are very <br> high |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | How much health disorders (For example, <br> cancer, etc.) do you expect to occur in the future <br> due to the current radiation exposure? | 1 | 2 | 3 | 4 |
|  | How much health effects do you think the <br> current radiation exposure will have on the <br> future generations (your future children or <br> grandchildren)? | 1 | 2 | 3 | 4 |

2) For the past month, how frequently did you experience inconveniences in your daily life due to your anxieties about radiation?

Frequently $\quad{ }_{2} \square$ Sometimes $\quad{ }_{3} \square$ Rarely $\quad{ }_{4} \square$ Never

Q13. Do you know anyone or any organization that you can consult regarding mental or physical issues that were caused by the Great East Japan Earthquake?


If you do, check $\sqrt{ }$ for all corresponding items below.
Family/relatives ${ }_{2} \square$ Friends/acquaintancesColleagues/superiorsMunicipal consultation service (City public health bureau, health center, etc.)Prefectural consultation service (Prefectural public health bureau/public health and welfare office, etc.)Mental health and welfare centerFukushima Kokoro no Care Center (Fukushima mental care center)Visiting care/nursing care service organizationsMedical institutions such as psychosomatic medicine/psychiatry/neurology/mental clinicsMedical institutions other than the above (general internal medicine, surgical department, ophthalmology, otorhinology, orthopedics, obstetrics and gynecology, etc.Facilities related to religion such as temples, shrines, churches, etc.Other
※ ※ If you have any concerns regarding your health or comments regarding this survey, please describe them below. Your comments will be used for references for future health management and surveys.

$[$
That is it for the questions. Please enclose the survey in a return envelope and send it by mail. Thank you for your cooperation.

Please answer the questionnaire regarding the basic survey.
Fukushima prefecture is conducting Fukushima Health Management Survey that aims to promote health of prefectural citizens at present and in the future. Have you submitted your basic survey questionnaire (the record of your behavior during the 4 months after the nuclear disaster)? (None of these responses will cause disadvantages to you).


Below are questions for those that answered "No" or "I don't know" above. Can we resend your child's basic survey questionnaire?Yes

## 〔Contact〕

- Exclusively for the Mental Health and Lifestyle Survey Radiation Medical Science Center,

Fukushima Medical University
Phone number: 024-549-5170
(9:00-17:00 (with the exception of Dec 29-Jan 3 and weekends/holidays))

## The Implementation Status of the Pregnancy and Birth Survey

Reported on 25 December 2014

First interim report on the 2013 "Pregnancy and Birth Survey" (responses that have been collected by Oct $31^{\text {st }}$ 2014)

1. Implementation status

For the 2013 "Pregnancy and Birth Survey," the survey targeted mothers who were issued a maternal and child health handbook within the prefecture from Aug $1^{\text {st }} 2012$ to Jul $31^{\text {st }} 2013$, or those who have been issued a maternity health record book outside the prefecture within the time period but have received prenatal examination and/or delivered the infant within the prefecture.
We have sent out 15,218 questionnaires after the middle of December 2013, and have re-sent questionnaires to people who have not responded as of Jul $31^{\text {st }} 2014$.
2. Main processing and analysis of the survey
(1) Response rate/number of respondents

The number of respondents (response rate) was 7,209 (47.4\%). The breakdown of each is the following: Kempoku area 1,918 (52.7\%), Kenchu area 1,969 (44.2\%), Kennan area 585 ( $48.2 \%$ ), Soso area 531 ( $45.1 \%$ ), Iwaki area 1,184 (44.7\%), Aizu area 831 (45.8\%), Minami-Aizu area 83 ( $51.2 \%$ ), and 108 outside of the prefecture.
(2) Pregnancy outcomes

- The ratio of miscarriage after the issuance of a maternity health record book was $0.78 \%$, and preterm birth was $5.38 \%$. These numbers were similar to those from 2011 (Miscarriage $0.77 \%$, early birth $4.75 \%$ ), and 2012 (Miscarriage $0.81 \%$, early birth $5.74 \%$ ).
- The incidence rate of congenital malformation or abnormalities for single births was $2.35 \%$. This number was similar to those from $2011(2.85 \%)$ and 2012 ( $2.39 \%$ ), as well as the national incidence rate ( $3-5 \%$ ). The most common congenital malformation or abnormality was congenital heart defects with an incidence rate of $0.92 \%$.
(3) Mothers' mental health
- The ratio of mothers determined to have depressive symptoms was ( $24.5 \%$ ) and have decreased compared to 2011 ( $27.1 \%$ ) and 2012 ( $25.5 \%$ ).
(Reference: According to Sukoyaka Oyako 21 or Healthy Parents and Children 21 (The national movement plan for MCH ), the ratio of postpartum depression evaluated by using the Edinburgh Postnatal Depression Scale was $9.0 \%$ (2013), and the estimated ratio of postpartum depression ratio from this survey based on the Edinburgh Postnatal Depression Scale was 13\%. Document used for estimation: Mishina H, et al. Pediatr Int. 2009; 51: 48.)
(4) Prenatal and delivery care
- For the question, "Do you believe you were able to receive sufficient overall prenatal/delivery care this time?" the percentage that responded "I don't think so" or "Not at all" was $2.3 \%$, and has decreased from 2012 (3.5\%).
- The ratio of those who did not continue to receive prenatal care or delivery services at the initially scheduled facility was $14.7 \%$. This was lower than 2011 ( $24.6 \%$ ) but similar to 2012 ( $14.1 \%$ ). By region, the ratio of outside the prefecture was the highest at $36.3 \%$, and was similar to 2012 ( $26.9 \%$ ). Those who changed to facilities outside the prefecture on their own accord was $22.4 \%$ and was less than 2011 (54.7\%) but similar to 2012 ( $24.9 \%$ ).
- The ratio of those who were unable to receive prenatal examination was $2.2 \%$ and was less than 2011 ( $18.8 \%$ ) but similar to 2012 ( $2.2 \%$ ).
(5) Household and child-rearing situations
- The ratio of those taking shelter (including temporary housing and others) was high in the Soso area ( $50.9 \%$ ). This has decreased compared to 2012 (61.3\%).
- The ratio of those who answered, "I sometimes lose confidence in child rearing" was $17.5 \%$, and increased since 2012 ( $15.4 \%$ ). According to the 2010 Infant Health Survey, the ratio of those who answered that they have no confidence in child rearing when their child was one year old was $23.0 \%$.
- Feeding methods for children until weaning include: "Only breast milk" $36.5 \%$, "combination of bottle milk and breast milk" $54.4 \%$, "Only milk" $8.7 \%$. The percentage of "Only breast milk" increased from $30.4 \%$ in 2011 and $35.2 \%$ in 2012. The reason for using milk included $1.7 \%$ who had concern for effects on breast milk due to radiation. This percentage has decreased from 2011 (19.8\%) and 2012 (6.2\%).
(6) Desire for next pregnancy and requests for medical institutions
- Those who wished to get pregnant again accounted for $52.8 \%$ ( $52.9 \%$ for 2012). According to the $14^{\text {th }}$ Birth Trend Basic Survey of 2010, among couples who have been married for less than 10 years, those who are planning to have children were $58 \%$ (and $51 \%$ for couples who already have children but wish to have more).
- For services requested by individuals who wish for a second pregnancy, the most common is "The expansion and enrichment of day-care center/extended hours childcare/sick child daycare" at $70.2 \%$, followed by "Information and services regarding child rearing and pediatric care" at $66.2 \%$.
- For reasons of not desiring a second pregnancy, the most common is "Because I don't wish to" at $50.0 \%$, followed by "I'm busy with my current child" at $35.9 \%$. Another reason was "Since I have concerns regarding the radiation" at $5.6 \%$ and this was less than $14.8 \%$ for 2012.
(7) Phone support situation
- Among the 7,209 respondents, those who were determined to require phone consultation/support were 1,098 . For the breakdown of support, the support for depression items were 741 ( $67.5 \%$ ), the support for free entry contents was 357 ( $32.5 \%$ ).
- The most common consultation contents were "Matters regarding the mental and physical state of the mother" at $42.4 \%$, followed by "Matters regarding child rearing" at $38.8 \%$. "Matters regarding
the impact and concerns regarding radiation" was at $17.1 \%$, and have shown a tendency of gradually decreasing compared to 2011 (29.2\%) and 2012 (23.7\%).
(8) For free entry contents
- Number of individuals who made entries in the free entry column were $861(12.0 \%)$ and this has decreased compared to 3,722 (42.2\%) in 2011, and 1,481 (20.7\%) in 2012.

Second total results for the "Pregnancy and Birth Survey" (Comparison with interim reports from 2011, 2012, 2013)

Note: Since the numerical values of the total results ratio are rounded to the closest whole number, there are cases where the total breakdown does not add up to $100 \%$.

## 1. Number of sent out questionnaires/number of responses

(2013) 7,209 targets responded during the time period between Dec $24^{\text {th }} 2013$ and Oct $31^{\text {st }} 2014$

| Area | Numbers sent out (\%) | Number of respondents <br> (\%) |
| :---: | :---: | :---: |
| Kempoku | 3,637 ( 23.9) | 1,918 ( 52.7) |
| Kenchu | 4,453 ( 29.3) | 1,969 ( 44.2) |
| Kennan | 1,213 ( 8.0) | 585 ( 48.2) |
| Soso | 1,178 ( 7.7) | 531 ( 45.1) |
| Iwaki | 2,649 ( 17.4) | 1,184 ( 44.7) |
| Aizu | 1,816 ( 11.9) | 831 ( 45.8) |
| Minami-Aizu | 162 ( 1.1) | 83 ( 51.2) |
| Outside of prefecture | 110 ( 0.7) | 108 ( 98.2) |
| Total | 15,218 (100.0) | 7,209 ( 47.4) |

(2012) 7,181 people responded during the time period between Dec $14^{\text {th }} 2012$ and Nov $30^{\text {th }} 2013$

| Area | Numbers sent out (\%) | Number of respondents <br> (\%) |
| :---: | :---: | :---: |
| Kempoku | 3,347 ( 23.1) | 1,857 ( 55.5) |
| Kenchu | 4,243 ( 29.2) | 2,067 ( 48.7) |
| Kennan | 1,164 ( 8.0) | 560 ( 48.1) |
| Soso | 1,145 ( 7.9) | 500 ( 43.7) |
| Iwaki | 2,516 ( 17.3) | 1,203 ( 47.8) |
| Aizu | 1,848 ( 12.7) | 819 ( 44.3) |
| Minami-Aizu | 157 ( 1.1) | 79 ( 50.3) |
| Outside of prefecture | 96 ( 0.7) | 96 (100.0) |
| Total | 14,516 (100.0) | 7,181 ( 49.5) |

(2011) 9,316 people responded during the time period between Jan $20^{\text {th }} 2012$ and Mar $31^{\text {st }} 2013$

| Area | Numbers sent out (\%) | Number of respondents <br> (\%) |
| :---: | :---: | :---: |
| Kempoku | 3,647 ( 22.8) | 2,288 ( 62.7) |
| Kenchu | 4,819 ( 30.1) | 2,857 ( 59.3) |
| Kennan | 1,256 ( 7.8) | 631 ( 50.2) |
| Soso | 1,468 ( 9.2) | 962 ( 65.5) |
| Iwaki | 2,711 ( 16.9) | 1,513 ( 55.8) |
| Aizu | 1,919 ( 12.0) | 957 ( 49.9) |
| Minami-Aizu | 152 ( 0.9) | 85 ( 55.9) |
| Outside of prefecture | 29 ( 0.2) | 23 ( 79.3) |
| Total | 16,001 (100.0) | 9,316 ( 58.2) |

For 2013, among the above-mentioned 7,209 respondents, the number of invalid responses was 42 (No response 10, not applicable 24, overlap 8) with a total of 7,167 collected responses. Furthermore, for each items there were no responses and invalid answers.
2. Pregnancy outcome

| (2013) Percentage of pregnancies (\%) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Currently pregnant | Delivered | Miscarriage | Abortion | Stillbirth | Total |
| Kempoku | 3(0.16) | 1,888( 98.80 ) | 15(0.78) | $0(0.00)$ | 5(0.26) | 1,911 |
| Kenchu | $1(0.05)$ | 1,937( 98.88) | 16(0.82) | $2(0.10)$ | $3(0.15)$ | 1,959 |
| Kennan | $1(0.17)$ | 575( 98.63) | 2(0.34) | $0(0.00)$ | $5(0.86)$ | 583 |
| Soso | $1(0.19)$ | 520( 98.48) | 5(0.95) | $0(0.00)$ | $2(0.38)$ | 528 |
| Iwaki | $3(0.25)$ | 1,158( 98.30) | 11(0.93) | 1(0.08) | $5(0.42)$ | 1,178 |
| Aizu | $0(0.00)$ | 816( 98.91) | 7(0.85) | $0(0.00)$ | $2(0.24)$ | 825 |
| Minami-Aizu | $0(0.00)$ | 82( 98.80$)$ | $0(0.00)$ | $0(0.00)$ | 1(1.20) | 83 |
| Outside of prefecture | $0(0.00)$ | 102(100.00) | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 102 |
| Total | $9(0.13)$ | 7,078( 98.73) | 56(0.78) | 3(0.04) | 23(0.32) | 7,169 |

※Twins were basically counted as one delivery. Only twins who had different clinical outcomes were counted as two.

| (2012) |  |  |  | Percentage of pregnancies (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Currently pregnant | Delivered | Miscarriage | Abortion | Stillbirth | Total |
| Kempoku | 12(0.65) | 1,812( 98.05) | 18(0.97) | $0(0.00)$ | $6(0.32)$ | 1,848 |
| Kenchu | 9(0.44) | 2,033( 98.64) | 11(0.53) | 2(0.10) | 6(0.29) | 2,061 |
| Kennan | 3(0.54) | 552( 98.57) | 5(0.89) | $0(0.00)$ | $0(0.00)$ | 560 |
| Soso | 4(0.82) | 470( 96.71) | 7(1.44) | 3(0.62) | 2(0.41) | 486 |
| Iwaki | 8(0.67) | 1,176( 98.16) | 12(1.00) | $0(0.00)$ | 2(0.17) | 1,198 |
| Aizu | 2(0.25) | 804( 98.53) | $5(0.61)$ | 1(0.12) | $4(0.49)$ | 816 |
| Minami-Aizu | $0(0.00)$ | 78(100.00) | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 78 |
| Outside of prefecture | $0(0.00)$ | 93(100.00) | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 93 |
| Total | 38(0.53) | 7,018( 98.29) | 58(0.81) | 6(0.08) | 20(0.28) | 7,140 |

※Twins were basically counted as one delivery. Only twins that have different clinical outcomes were counted as two.
(2011) Percentage of pregnancies (\%)

| Area | Currently pregnant | Delivered | Miscarriage | Abortion | Stillbirth | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 20(0.92) | 2,124(98.11) | 16(0.74) | 1(0.05) | 4(0.18) | 2,165 |
| Kenchu | 45(1.67) | 2,616(96.92) | 28(1.04) | $2(0.07)$ | $8(0.30)$ | 2,699 |
| Kennan | 7(1.17) | 588( 98.00) | 4(0.67) | $0(0.00)$ | 1(0.17) | 600 |
| Soso | $4(0.44)$ | 897( 98.25) | $7(0.77)$ | 1(0.11) | 4(0.44) | 913 |
| Iwaki | 20(1.41) | 1,384(97.33) | 12(0.84) | 1(0.07) | 5(0.35) | 1,422 |
| Aizu | 18(1.98) | 888( 97.91) | 1(0.11) | $0(0.00)$ | $0(0.00)$ | 907 |
| Minami-Aizu | 2(2.38) | 82(97.62) | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 84 |
| Outside of prefecture | $0(0.00)$ | 22(100.00) | $0(0.00)$ | 0 (0.00) | 0 (0.00) | 22 |
| Total | 116(1.32) | 8,601( 97.61) | 68(0.77) | $5(0.06)$ | 22(0.25) | 8,812 |

Premature delivery rate* (Premature delivery is when the gestational age is 22-36 weeks)
(2013) (Singletons/twins)

| Area | (singletons/twins) Number of delivery weeks |  |  |  |  |  |  |  | Premature Premature delivery delivery rate count (\%)** <br> (22- <br> 36 weeks) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Premature delivery |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{\|c} 12- \\ 21 \text { weeks } \\ \hline \end{array}$ | 22- <br> 23 weeks | 2427 weeks | 28- <br> 31 weeks | 32- <br> 36 weeks | 3741 weeks | 42 weeks or more |  |  |  |
| Kempoku | 4 | 2 | 2 | 7 | 86 | 1,805 | 3 | 1,909 | 97 | 5.09 |
| Kenchu | 11 | 0 | 5 | 10 | 80 | 1,854 | 5 | 1,965 | 95 | 4.86 |
| Kennan | 1 | 0 | 5 | 1 | 30 | 542 | 7 | 586 | 36 | 6.15 |
| Soso | 1 | 0 | 0 | 1 | 34 | 490 | 1 | 527 | 35 | 6.65 |
| Iwaki | 5 | 2 | 4 | 7 | 60 | 1,083 | 9 | 1,170 | 73 | 6.27 |
| Aizu | 2 | 0 | 0 | 4 | 41 | 775 | 2 | 824 | 45 | 5.47 |
| Minami- <br> Aizu | 0 | 0 | 0 | 0 | 2 | 82 | 0 | 84 | 2 | 2.38 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 1 | 101 | 0 | 102 | 1 | 0.98 |
| Total | 24 | 4 | 16 | 30 | 334 | 6,732 | 27 | 7,167 | 384 | 5.38 |

*The premature delivery rate was calculated by excluding cases where the number of fetuses or the number of weeks is unknown and when it was less than 12 weeks. Since twins were counted separately, they do not match the target number. Since one of the twins was a miscarriage less than 12 weeks in one of the cases, it was omitted from the data.
${ }^{* *}$ Premature delivery rate was determined by deducting the number of childbirths less than 22 weeks from the total number of childbirths and using the result as the denominator.
(2012) (Singletons/twins)

| Area | (Singletons/twins) Number of delivery weeks |  |  |  |  |  |  |  | Premature Premature delivery delivery rate 22- <br> 36 weeks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 12- \\ 21 \text { weeks } \\ \hline \end{gathered}$ | Premature delivery |  |  |  | 37- <br> 41 weeks | 42 weeks or more | Number of deliveries |  |  |
|  |  | 22- <br> 23 weeks | 24- <br> 27 weeks | 28- <br> 31 weeks | 32- <br> 36 weeks |  |  |  |  |  |
| Kempoku | 7 | 0 | 3 | 7 | 75 | 1,734 | 6 | 1,832 | 85 | 4.66 |
| Kenchu | 7 | 3 | 5 | 10 | 115 | 1,911 | 7 | 2,058 | 133 | 6.48 |
| Kennan | 4 | 0 | 1 | 3 | 19 | 530 | 5 | 562 | 23 | 4.12 |
| Soso | 8 | 1 | 3 | 6 | 23 | 442 | 2 | 485 | 33 | 6.92 |
| Iwaki | 7 | 0 | 3 | 5 | 57 | 1,122 | 1 | 1,195 | 65 | 5.47 |
| Aizu | 4 | 1 | 2 | 3 | 54 | 755 | 0 | 819 | 60 | 7.36 |
| Minami- <br> Aizu | 0 | 0 | 0 | 0 | 8 | 71 | 0 | 79 | 8 | 10.13 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 93 | 0 | 0.00 |
| Total | 37 | 5 | 17 | 34 | 351 | 6,658 | 21 | 7,123 | 407 | 5.74 |

(2011) (Singletons/twins)

| Area | (Singletons/twins) Number of delivery weeks |  |  |  |  |  |  |  | Premature Premature delivery delivery rate 2236 weeks |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 12- \\ 21 \text { weeks } \\ \hline \end{gathered}$ | Premature delivery |  |  |  |  |  | Number of deliveries |  |  |
|  |  | 2223 weeks | 24- <br> 27 weeks | 28- <br> 31 weeks | 32- <br> 36 weeks | 37- <br> 41 weeks | 42 weeks or more |  |  |  |
| Kempoku | 10 | 1 | 3 | 5 | 84 | 2,032 | 6 | 2,141 | 93 | $3 \quad 4.36$ |
| Kenchu | 14 | 2 | 2 | 15 | 103 | 2,509 | 15 | 2,660 | 122 | $22 \quad 4.61$ |
| Kennan | 2 | 2 | 0 | 4 | 23 | 559 | 4 | 594 | 29 | $9 \times \quad 4.90$ |
| Soso | 2 | 2 | 4 | 4 | 30 | 849 | 4 | 895 | 40 | $0 \quad 4.48$ |
| Iwaki | 5 | 2 | 3 | 6 | 64 | 1,317 | 10 | 1,407 | 75 | $5 \quad 5.35$ |
| Aizu | 0 | 1 | 0 | 2 | 47 | 845 | 2 | 897 | 50 | $0 \quad 5.57$ |
| Minami -Aizu | 0 | 0 | 0 | 0 | 3 | 81 | 0 | 84 |  | $3 \quad 3.57$ |
| Outside of prefectur | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 22 |  | $0 \quad 0.00$ |
| Total | 33 | 10 | 12 | 36 | 354 | 8,214 | 41 | 8,700 | 412 | 24.75 |

## Presence of congenital malformation/abnormality

This targeted singletons after 12 weeks.

| (2013) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid responses | Total |
| Kempoku | 42(2.25) | 1,789(96.03) | 32(1.72) | 1,863 |
| Kenchu | 46(2.39) | 1,826(94.86) | 53(2.75) | 1,925 |
| Kennan | 8(1.40) | 549(96.32) | 13(2.28) | 570 |
| Soso | 9(1.74) | 495(95.74) | 13(2.51) | 517 |
| Iwaki | 33(2.85) | 1,096(94.81) | 27(2.34) | 1,156 |
| Aizu | 19(2.36) | 767(95.28) | 19(2.36) | 805 |
| Minami-Aizu | 2(2.44) | 80(97.56) | 0 (0.00) | 82 |
| Outside of prefecture | 2(1.96) | 97(95.10) | 3(2.94) | 102 |
| Total | 161(2.29) | 6,699(95.43) | 160(2.28) | 7,020 |

Incidence rate of congenital malformation/abnormality: $2.35 \%$ (The denominator was the number of valid responses)

| (2012) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid response | Total |
| Kempoku | 39(2.16) | 1,735(95.96) | 34(1.88) | 1,808 |
| Kenchu | 50(2.48) | 1,930(95.54) | 40(1.98) | 2,020 |
| Kennan | 13(2.36) | 520(94.55) | 17(3.09) | 550 |
| Soso | 14(2.95) | 437(92.00) | 24(5.05) | 475 |
| Iwaki | 25(2.14) | 1,117(95.72) | 25(2.14) | 1,167 |
| Aizu | 19(2.37) | 761(94.77) | 23(2.86) | 803 |
| Minami-Aizu | 1(1.30) | 76(98.70) | $0(0.00)$ | 77 |
| Outside of prefecture | 2(2.15) | 90(96.77) | 1(1.08) | 93 |
| Total | 163(2.33) | 6,666(95.32) | 164(2.35) | 6,993 |

Incidence rate of congenital malformation/abnormality: $2.39 \%$ (The denominator is the number of valid responses)


Incidence rate of congenital malformation/abnormality: $2.85 \%$ (The denominator is the number of valid responses)

Incidence rate of each disease
These targeted singletons with congenital malformations/abnormalities (multiple answers possible)

| Area | Cataract | Heart <br> defect | Kidney/ <br> urinary <br> tract <br> malform <br> ation | Spina <br> bifida | Microcep <br> haly | Hydroce phalus | Cleft lip/ palate | Gastroint estinal atresia | Imperfor ate anus | Polydact <br> yly/synd actyly | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 0 | 20 | 4 | 0 | 0 | 1 | 1 | 2 | 0 | 3 | 16 |
| Kenchu | 0 | 16 | 3 | 2 | 0 | 0 | 4 | 1 | 0 | 8 | 17 |
| Kennan | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 2 |
| Soso | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 2 |
| Iwaki | 1 | 14 | 1 | 0 | 0 | 0 | 4 | 1 | 0 | 4 | 8 |
| Aizu | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 8 |
| Minami- <br> Aizu | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Total | 1 | 63 | 12 | 3 | 0 | 1 | 11 | 6 | 2 | 22 | 55 |
| Area | 0.01\% | 0.92\% | 0.17\% | 0.04\% | 0.00\% | 0.01\% | 0.16\% | 0.09\% | 0.03\% | 0.32\% | 0.80\% |

※Multiple answers were possible. The denominator of incidence rates was the number of valid responses (total number of those who have responded "yes" or "no")

## Breakdown of "Other"

Singletons with congenital malformations/abnormalities (multiple answers possible)

| Ear appendage | 7 | Oligodactyly | 2 | Hernia of umbilical cord | 1 | Congenital chylothorax | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Club foot | 7 | Birthmark | 2 | Absence of both arms | 1 | Ear deformity | 1 |
| Microtia | 6 | Congenital adrenal hyperplasia | 2 | 18 trisomy | 1 | Diaphragmatic hernia | 1 |
| Down syndrome | 4 | Absence of scalp | 1 | Ptosis | 1 | Malrotation | 1 |
| Fistula auris congenita | 3 | Gastrointestinal perforation | 1 | Limb-shortening syndrome | 1 | Methemogulobinemia | 1 |
| Chromosomal abnormality | 2 | Congenital back knee | 1 | Inguinal hernia | 1 | Split-hand/ Split-foot malformation | 1 |
| Deafness | 2 | Pes abductus | 1 | Obstructio ductus nasolacrimalis | 1 | Brachydactyly | 1 |
| Angioma | 2 | Osteogenesis imperfecta | 1 | Hypothyroidism | 1 | Congenital knee dislocation | 1 |

(2012)

| Area | Cataract | Heart <br> defect | Kidney/ <br> urinary <br> tract <br> malform <br> ation | Spina bifida | Microcep <br> haly | Hydroce phalus | Cleft lip/ <br> palate | Gastroint estinal atresia | Imperfor ate anus | Polydact <br> yly/synd actyly | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 0 | 8 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 4 | 19 |
| Kenchu | 0 | 20 | 5 | 0 | 1 | 0 | 4 | 2 | 0 | 3 | 23 |
| Kennan | 1 | 5 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 3 |
| Soso | 1 | 6 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 4 |
| Iwaki | 0 | 9 | 2 | 1 | 0 | 0 | 3 | 1 | 1 | 4 | 6 |
| Aizu | 0 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 2 | 8 |
| Minami- <br> Aizu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Total | 2 | 54 | 14 | 3 | 1 | 2 | 14 | 7 | 2 | 15 | 64 |
| Incidenc e rate | 0.03\% | 0.79\% | 0.21\% | 0.04\% | 0.01\% | 0.03\% | 0.21\% | 0.10\% | 0.03\% | 0.22\% | 0.94\% |

※Multiple answers were possible. The denominator of incidence rates was the number of valid responses (Total number of people who responded "yes" or "no")

Breakdown of "other"
Singletons with congenital malformations/abnormalities (multiple choices were allowed)

| Ear appendage | 10 | Albinism | 1 | Fistula auris congenita | 1 | Osteogenesis imperfecta | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Down syndrome | 7 | Cystic lung <br> adenomatoid  <br> deformity  | 1 | Congenital hydrothorax | 1 | Localized gastrointestinal perforation | 1 |
| Deafness | 2 | Encephalocele | 1 | Congenital spherocytosis | 1 | Angioma | 1 |
| Malrotation | 2 | Vestigial remnant between allantois | 1 | Congenital cytomegalovirus | 1 | Liver hemangioma | 1 |
| Hydrops fetalis | 2 | Clubfoot | 1 | Ankyloglossia | 1 | Pes calcaneovalgus | 1 |
| Cavernous hemangioma | 2 | Craniotabes | 1 | Toxic erythema of the newborn | 1 | External auditory canal atresia | 1 |
| Diaphragmatic hernia | 2 | Simple hemangioma | 1 | Arms hypoplasia | 1 | Microphthalmia | 1 |
| Arachnoidal cyst | 2 | Dislocation | 1 | Microtia | 1 | Dextrocardia | 1 |
| Ovarian cyst | 1 | Chromosomal abnormality | 1 | Auricle low formation | 1 | Torticollis | 1 |
| Birthmark | 1 | Congenital knee dislocation | 1 | Auricle abnormality | 1 | Inguinal hernia | 1 |
| Adrenal hyperplasia | 1 | Congenital pigmented mole | 1 | Ear deformity | 1 | Trisomy 18 | 1 |

(2011) Number of cases (\%)

| Area | Cataract | Heart <br> defect | $\left[\begin{array}{c} \text { Kidney/ } \\ \text { urinary } \\ \text { tract } \\ \text { malformatit } \\ \text { on } \end{array}\right.$ | Spina <br> bifida | Microceph <br> aly | Hydroceph <br> alus | Cleft lip/ palate | Gastrointe | Imperforat <br> e anus | Polydactyl <br> y/syndacty ly | Other | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 0 | 20 | 6 | 1 | 0 | 0 | 6 | 1 | 2 | 2 | 23 | 61 |
| Kenchu | 1 | 22 | 9 | 3 | 1 | 1 | 6 | 2 | 1 | 7 | 33 | 86 |
| Kennan | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 12 | 22 |
| Soso | 0 | 5 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 | 9 | 20 |
| Iwaki | 0 | 14 | 5 | 1 | 0 | 0 | 0 | 1 | 1 | 5 | 16 | 43 |
| Aizu | 0 | 7 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 10 | 23 |
| Minami <br> Aizu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total | 1 | 73 | 22 | 6 | 1 | 1 | 15 | 6 | 5 | 22 | 104 | 256 |
| Incidenc <br> e rate | 0.01\% | 0.89\% | 0.27\% | 0.07\% | 0.01\% | 0.01\% | 0.18\% | 0.07\% | 0.06\% | 0.27\% | 1.27\% | 3.12\% |

※Multiple answers were possible. The denominator of incidence rates was the number of valid responses (Total number of people who have responded "yes" or "no")
※Since the total including invalid responses was taken as the denominator in the result report of 2011, the values differed from ones obtained this time.

## Breakdown of "other"

Singletons with congenital malformations/abnormalities (multiple answers were possible)

| Birth mark | 9 | Congenital hip dislocation | 2 | Pes calcaneovalgus | 1 | Congenital cystic adenomatoid deformity | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ear appendage | 8 | Holoprosencephaly | 2 | Ptosis | 1 | Congenital cutis laxa | 1 |
| Down syndrome | 6 | Cryptorchidism | 2 | Depressor anguli oris muscle | 1 | Chromosomal abnormality | 1 |
| Angioma | 5 | Chylothorax | 2 | Depressor anguli oris muscle hypoplasia | 1 | Hydrops fetalis | 1 |
| Inguinal hernia | 4 | Gastroschisis | 2 | Laryngomalacia | 1 | Thanatophoric dysplasia | 1 |
| Clubfoot | 4 | Cleft hand | 2 | Thyroid abnormalities | 1 | Malrotation | 1 |
| Deafness | 4 | Trisomy 13 | 1 | Hypothyroidism | 1 | Craniotabes | 1 |
| Infantile hemangioma (strawberry mark) | 3 | Trisomy 18 | 1 | Lipoma | 1 | Persistent pupillary membrane | 1 |
| Microtia | 3 | Klinefelter's syndrome | 1 | Auricle abnormality/ meatal atresia | 1 | Achondroplasia | 1 |
| Dermal sinus | 3 | Rickets | 1 | Microphthalmia | 1 | Periventricular leukomalacia | 1 |
| Cretinism | 2 | Cytomegalovirus infection | 1 | Frenulum of upper lip ankylosis | 1 | Skin tumor (eye) | 1 |
| Hydrocele | 2 | Prader-Willi syndrome | 1 | Testicular agenesis (One side) | 1 | Obstructio ductus nasolacrimalis | 1 |
| Torticollis | 2 | Diaphragmatic hernia | 1 | Cystic teratoma | 1 | Congenital adrenal hyperplasia | 1 |
| Incontinentia pigmenti | 2 | Ambiguous genitalia | 1 | Fistula auris congenita | 1 | Hernia of the umbilical cord | 1 |
|  |  |  |  |  |  | Neck lymphangioma | 1 |

Presence of congenital malformation/abnormality
This targeted twins after 12 weeks.
(2013)

Number of cases (\%)

| Area | Yes | No | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $2(4.35)$ | $42(91.30)$ | $2(4.35)$ | 46 |
| Kenchu | $6(15.00)$ | $33(82.50)$ | $1(2.50)$ | 40 |
| Kennan | $0(0.00)$ | $15(93.75)$ | $1(6.25)$ | 16 |
| Soso | $0(0.00)$ | $8(80.00)$ | $2(20.00)$ | 10 |
| Iwaki | $2(14.29)$ | $10(71.43)$ | $2(14.29)$ | 14 |
| Aizu | $1(5.26)$ | $17(89.47)$ | $1(5.26)$ | 19 |
| Minami-Aizu | $1(50.00)$ | $1(50.00)$ | $0(0.00)$ | 2 |
| Outside of <br> prefecture | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 0 |
| Total | $12(8.16)$ | $126(85.71)$ | $9(6.12)$ | 147 |

Since one of the twins was a miscarriage less than 12 weeks, this was omitted; thus, the number is not a multiple of 2 .
(2012) Number of cases (\%)

| Area | Yes | No | Invalid <br> responses | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $1(4.17)$ | $22(91.67)$ | $1(4.17)$ | 24 |
| Kenchu | $1(2.63)$ | $37(97.37)$ | $0(0.00)$ | 38 |
| Kennan | $0(0.00)$ | $12(100.00)$ | $0(0.00)$ | 12 |
| Soso | $0(0.00)$ | $9(90.0)$ | $1(10.00)$ | 10 |
| Iwaki | $1(3.57)$ | $23(82.14)$ | $4(14.29)$ | 28 |
| Aizu | $1(6.25)$ | $15(93.75)$ | $0(0.00)$ | 16 |
| Minami-Aizu | $0(0.00)$ | $2(100.00)$ | $0(0.00)$ | 0 |
| Outside of <br> prefecture | $0(0.00)$ | $0(0.00)$ | $0(0.00)$ | 0 |
| Total | $4(3.08)$ | $120(92.31)$ | $6(4.62)$ | 130 |


| (2011) Number of cases (\%) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid responses | Total |
| Kempoku | 2 ( 8.33) | 19 ( 79.17) | 3 (12.50) | 24 |
| Kenchu | 3 ( 5.36) | 50 ( 89.29) | 3 ( 5.36) | 56 |
| Kennan | 1 (10.00) | 9 ( 90.00) | 0 ( 0.00) | 10 |
| Soso | 0 ( 0.00) | 4 (100.00) | 0 ( 0.00) | 4 |
| Iwaki | 0 ( 0.00) | 36 ( 90.00) | 4 (10.00) | 40 |
| Aizu | 2 ( 8.33) | 20 ( 83.33) | 2 ( 8.33) | 24 |
| Minami-Aizu | $0(0.00)$ | 3 ( 75.00) | 1 (25.00) | 4 |
| Outside of prefecture | 0 ( 0.00) | 0 ( 0.00) | 0 ( 0.00) | 0 |
| Total | 8 ( 4.94) | 141 ( 87.04) | 13 ( 8.02) | 162 |

These targeted cases of twins with congenital malformation/abnormality (Multiple answers were possible)

| Area | Cataract | Heart defect | Kidney/ urinary tract malform ation | Spina bifida | Microce phaly | Hydroce phalus | Cleft lip/ palate | Gastro intestinal artesia | $\begin{gathered} \text { Imperforate } \\ \text { anus } \end{gathered}$ | Polydactyly/ syndactyly | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Kenchu | 0 | 3 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 1 |
| Kennan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soso | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iwaki | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aizu | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MinamiAizu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 6 | 0 | 1 | 0 | 2 | 2 | 1 | 0 | 0 | 3 |

Breakdown of "other"

| Ear appendage | 1 case |
| :--- | :--- |
| Absence of scalp | 1 case |
| Asplenia syndrome | 1 case |

(2012)

| Area | Cataract | Heart defect | $\begin{aligned} & \hline \text { Kidney/ } \\ & \text { urinary } \\ & \text { tract } \\ & \text { malform } \\ & \text { ation } \end{aligned}$ | $\begin{aligned} & \text { Spina } \\ & \text { bifida } \end{aligned}$ | Microce phaly | Hydroce phalus | $\begin{aligned} & \text { Cleft } \\ & \text { lip/ } \\ & \text { palate } \end{aligned}$ | Gastro intestinal artesia | Imperforate <br> anus | Polydactyly /syndactyly | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Kenchu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Kennan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soso | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iwaki | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Aizu | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Minami- <br> Aizu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Outside of prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |

Breakdown of "other"

| Hypothyroidism | 1 case |
| :--- | :--- |
| Hernia | 1 case |


| (2011) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Cataract | Heart defect | Kidney/ urinary tract malform ation | Spina bifida | Microc ephaly | Hydroc ephalus | Cleft lip/ palate | Gastroin testinal artesia | Imperfor ate anus | Polydact yly/synd actyly | Other |
| Kempoku | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Kenchu | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Kennan | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soso | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iwaki | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aizu | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Minam -Aizu | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outside <br> of <br> prefecture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 3 |

Breakdown of "other"

| Congenital cystic <br> adenomatoid deformity <br> Hydrops fetalis | 1 case |
| :--- | :--- |

## 3. Mothers' mental health

Tendency for depression: Number of respondents who answered yes for both, yes for one of them, and no for both.

| (2013) |  |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Yes for both | Yes for one | No for both | Invalid responses | Total |
| Kempoku | 202(10.6) | 300(15.7) | 1,401(73.3) | 8(0.4) | 1,911 |
| Kenchu | 190( 9.7) | 252(12.9) | 1,511(77.1) | $6(0.3)$ | 1,959 |
| Kennan | 62(10.6) | 84(14.4) | 436(74.8) | 1(0.2) | 583 |
| Soso | 66(12.5) | 84(15.9) | 376(71.2) | 2(0.4) | 528 |
| Iwaki | 112(9.5) | 156(13.3) | 906(77.0) | 3(0.3) | 1,177 |
| Aizu | 83(10.1) | 108(13.1) | 629(76.3) | 4(0.5) | 824 |
| Minami-Aizu | 13(15.7) | 14(16.9) | 55(66.3) | 1(1.2) | 83 |
| Outside of prefecture | 10( 9.8) | 17(16.7) | 74(72.5) | 1(1.0) | 102 |
| Total | 738(10.3) | 1,015(14.2) | 5,388(75.2) | 26(0.4) | 7,167 |

※Tendency for depression: $24.5 \%$ (("Yes for both" $738+$ "Yes for one" 1,015 ) / Total 7,167 cases)

| (2012) N |  |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Yes for both | Yes for one | No for both | Invalid responses | Total |
| Kempoku | 188(10.2) | 295(16.0) | 1,363(73.8) | 1(0.1) | 1,847 |
| Kenchu | 225(10.9) | 310(15.0) | 1,522(73.8) | 4(0.2) | 2,061 |
| Kennan | 47( 8.4) | 86(15.4) | 423(75.5) | $4(0.7)$ | 560 |
| Soso | 67(13.8) | 89(18.3) | 330(67.9) | $0(0.0)$ | 486 |
| Iwaki | 111( 9.3) | 157(13.1) | 928(77.5) | $2(0.2)$ | 1,198 |
| Aizu | 94(11.5) | 117(14.3) | 602(73.8) | 3(0.4) | 816 |
| Minami-Aizu | 5( 6.4) | 9(11.5) | 64(82.1) | 0(0.0) | 78 |
| Outside of prefecture | 5( 5.4) | 17(18.3) | 71(76.3) | $0(0.0)$ | 93 |
| Total | 742(10.4) | 1,080(15.1) | 5,303(74.3) | 14(0.2) | 7,139 |

※Tendency for depression: $25.5 \%$ (("Yes for both" $742+$ "Yes for one" 1,080 ) / Total 7,139 cases)

| (2011) |  |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Yes for both | Yes for one | No for both | Invalid responses | Total |
| Kempoku | 290(13.4) | 350(16.2) | 1,482(68.5) | 43(2.0) | 2,165 |
| Kenchu | 344(12.7) | 379(14.0) | 1,922(71.2) | 54(2.0) | 2,699 |
| Kennan | 77(12.8) | 83(13.8) | 426(71.0) | 14(2.3) | 600 |
| Soso | 166(18.2) | 134(14.7) | 584(64.0) | 29(3.2) | 913 |
| Iwaki | 175(12.3) | 176(12.4) | 1,046(73.6) | 25(1.8) | 1,422 |
| Aizu | 83( 9.2) | 121(13.3) | 686(75.6) | 17(1.9) | 907 |
| Minami <br> -Aizu | 1( 1.2) | 4( 4.8) | 76(90.5) | 3(3.6) | 84 |
| Outside <br> of <br> prefecture | 5(22.7) | 4(18.2) | 12(54.5) | 1(4.5) | 22 |
| Total | 1,141(12.9) | 1,251(14.2) | 6,234(70.7) | 186(2.1) | 8,812 |

※Tendency for depression: 27.1\% (("Yes for both" $1,141+$ "Yes for one" 1,251 ) / Total 8,812)

## 4. Prenatal/delivery care

Do you think you were able to receive sufficient care regarding prenatal/delivery in general this time?

| (2013) |  |  |  |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | I strongly think so | I think so | I can't say | I don't think so | $\begin{gathered} \text { I don't think so } \\ \text { at all } \end{gathered}$ | Invalid responses | Total |
| Kempoku | 511(26.7) | 1,171(61.3) | 184(9.6) | 33(1.7) | $9(0.5)$ | 3(0.2) | 1,911 |
| Kenchu | 500(25.5) | 1,187(60.6) | 224(11.4) | 37(1.9) | 8(0.4) | 3(0.2) | 1,959 |
| Kennan | 113(19.4) | 372(63.8) | 88(15.1) | 7(1.2) | 1(0.2) | 2(0.3) | 583 |
| Soso | 140(26.5) | 296(56.1) | 67(12.7) | 20(3.8) | 3(0.6) | 2(0.4) | 528 |
| Iwaki | 313(26.6) | 695(59.0) | 140(11.9) | 22(1.9) | 4(0.3) | 3(0.3) | 1,177 |
| Aizu | 181(22.0) | 543(65.9) | 80( 9.7) | 14(1.7) | 2(0.2) | 4(0.5) | 824 |
| Minami-Aizu | 19(22.9) | 54(65.1) | 5(6.0) | 3(3.6) | 1(1.2) | 1(1.2) | 83 |
| Outside of prefecture | 29(28.4) | 65(63.7) | 5(4.9) | 2(2.0) | 0 (0.0) | 1(1.0) | 102 |
| Total | 1,806(25.2) | 4,383(61.2) | 793(11.1) | 138(1.9) | 28(0.4) | 19(0.3) | 7,167 |

(2012)

| Area | I strongly <br> think so | I think so | I can't say | I don't <br> think so | I don't <br> think so at <br> all | Invalid <br> responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $451(24.4)$ | $1,089(59.0)$ | $242(13.1)$ | $49(2.7)$ | $15(0.8)$ | $1(0.1)$ | 1,847 |
| Kenchu | $430(20.9)$ | $1,203(58.4)$ | $339(16.4)$ | $61(3.0)$ | $22(1.1)$ | $6(0.3)$ | 2,061 |
| Kennan | $94(16.8)$ | $340(60.7)$ | $106(18.9)$ | $14(2.5)$ | $2(0.4)$ | $4(0.7)$ | 560 |
| Soso | $89(18.3)$ | $277(57.0)$ | $95(19.5)$ | $18(3.7)$ | $5(1.0)$ | $2(0.4)$ | 486 |
| Iwaki | $310(25.9)$ | $694(57.9)$ | $151(12.6)$ | $32(2.7)$ | $7(0.6)$ | $4(0.3)$ | 1,198 |
| Aizu | $165(20.2)$ | $509(62.4)$ | $115(14.1)$ | $20(2.5)$ | $3(0.4)$ | $4(0.5)$ | 816 |
| Minami-Aizu | $21(26.9)$ | $50(64.1)$ | $5(6.4)$ | $2(2.6)$ | $0(0.0)$ | $0(0.0)$ | 78 |
| Outside of <br> prefecture | $42(45.2)$ | $43(46.2)$ | $6(6.5)$ | $2(2.2)$ | $0(0.0)$ | $0(0.0)$ | 93 |
| Total | $1,602(22.4)$ | $4,205(58.9)$ | $1,059(14.8)$ | $198(2.8)$ | $54(0.8)$ | $21(0.3)$ | 7,139 |

Did you continue to receive these services at a facility where you were initially scheduled to receive prenatal examination/delivery?
(2013)

| Area | Yes | No | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $1,597(83.6)$ | $307(16.1)$ | $7(0.4)$ | 1,911 |
| Kenchu | $1,657(84.6)$ | $292(14.9)$ | $10(0.5)$ | 1,959 |
| Kennan | $522(89.5)$ | $60(10.3)$ | $1(0.2)$ | 583 |
| Soso | $450(85.2)$ | $76(14.4)$ | $2(0.4)$ | 528 |
| Iwaki | $1,009(85.7)$ | $159(13.5)$ | $9(0.8)$ | 1,177 |
| Aizu | $712(86.4)$ | $107(13.0)$ | $5(0.6)$ | 824 |
| Minami-Aizu | $70(84.3)$ | $13(15.7)$ | $0(0.0)$ | 83 |
| Outside of <br> prefecture | $65(63.7)$ | $37(36.3)$ | $0(0.0)$ | 102 |
| Total | $6,082(84.9)$ | $1,051(14.7)$ | $34(0.5)$ | 7,167 |


| Area | Another within prefecture on my own will ${ }_{1}$ | Another outside prefecture on my own will ${ }_{2}$ | Another within prefecture due to medical reasons ${ }_{3}$ | Another outside prefecture due to medical reasons ${ }_{4}$ | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 107(34.9) | 58(18.9) | 131(42.7) | 2(0.7) | 9(2.9) | 307 |
| Kenchu | 88(30.1) | 54(18.5) | 140(47.9) | 3(1.0) | 7(2.4) | 292 |
| Kennan | 23(38.3) | 18(30.0) | 17(28.3) | 2(3.3) | $0(0.0)$ | 60 |
| Soso | 36(47.4) | 15(19.7) | 21(27.6) | 1(1.3) | 3(3.9) | 76 |
| Iwaki | 34(21.4) | 33(20.8) | 88(55.3) | 2(1.3) | 2(1.3) | 159 |
| Aizu | 26(24.3) | 22(20.6) | 58(54.2) | $0(0.0)$ | 1(0.9) | 107 |
| Minami-Aizu | 5(38.5) | 3(23.1) | 5(38.5) | $0(0.0)$ | $0(0.0)$ | 13 |
| Outside of prefecture | 2( 5.4) | 32(86.5) | 3( 8.1) | 0 (0.0) | 0 (0.0) | 37 |
| Total | 321(30.5) | 235(22.4) | 463(44.1) | 10(1.0) | 22(2.1) | 1,051 |

1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 4 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.
(2012)

| Area | Yes | No | Invalid response | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $1,589(86.0)$ | $248(13.4)$ | $10(0.5)$ | 1,847 |
| Kenchu | $1,743(84.6)$ | $307(14.9)$ | $11(0.5)$ | 2,061 |
| Kennan | $490(87.5)$ | $68(12.1)$ | $2(0.4)$ | 560 |
| Soso | $391(80.5)$ | $92(18.9)$ | $3(0.6)$ | 486 |
| Iwaki | $1,038(86.6)$ | $152(12.7)$ | $8(0.7)$ | 1,198 |
| Aizu | $703(86.2)$ | $111(13.6)$ | $2(0.2)$ | 816 |
| Minami-Aizu | $71(91.0)$ | $7(9.0)$ | $0(0.0)$ | 78 |
| Outside of <br> prefecture | $67(72.0)$ | $25(26.9)$ | $1(1.1)$ | 93 |
| Total | $6,092(85.3)$ | $1,010(14.1)$ | $37(0.5)$ | $7,-139$ |

Breakdown of "No" (did not continue) (2012) Number of cases (\%)

| Area | Another within prefecture on my own will ${ }_{1}$ | Another outside prefecture on my own will ${ }_{2}$ | Another within prefecture due to medical reasons ${ }_{3}$ | Another outside prefecture due to medical reasons ${ }_{4}$ | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 70(28.2) | 63(25.4) | 108(43.5) | $2(0.8)$ | 5(2.0) | 248 |
| Kenchu | 74(24.1) | 70(22.8) | 151(49.2) | 3(1.0) | 9(2.9) | 307 |
| Kennan | 27(39.7) | 21(30.9) | 20(29.4) | $0(0.0)$ | $0(0.0)$ | 68 |
| Soso | 34(37.0) | 24(26.1) | 26(28.3) | 7(7.6) | 1(1.1) | 92 |
| Iwaki | 35(23.0) | 34(22.4) | 82(53.9) | $0(0.0)$ | 1(0.7) | 15 |
| Aizu | 34(30.6) | 18(16.2) | 57(51.4) | $0(0.0)$ | 2(1.8) | 111 |
| Minami-Aizu | 2(28.6) | 1(14.3) | 4(57.1) | $0(0.0)$ | $0(0.0)$ |  |
| Outside of prefecture | 4(16.0) | 20(80.0) | 1( 4.0) | O(0.0) | O(0.0) | 25 |
| Total | 280(27.7) | 251(24.9) | 449(44.5) | 12(1.2) | 18(1.8) | 1,010 |

1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 4 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.

| (2011) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid response | Total |
| Kempoku | 1,860(85.9) | 288(13.3) | 17(0.8) | 2,165 |
| Kenchu | 2,050(76.0) | 626(23.2) | 23(0.9) | 2,699 |
| Kennan | 497(82.8) | 94(15.7) | 9(1.5) | 600 |
| Soso | 236(25.8) | 665(72.8) | 12(1.3) | 913 |
| Iwaki | 1,036(72.9) | 369(25.9) | 17(1.2) | 1,422 |
| Aizu | 798(88.0) | 99(10.9) | 10(1.1) | 907 |
| Minami- <br> Aizu | 78(92.9) | 6( 7.1) | O(0.0) | 84 |
| Outside of prefecture | 5(22.7) | 17(77.3) | 0(0.0) | 22 |
| Total | 6,560(74.4) | 2,164(24.6) | 88(1.0) | 8,812 |

Breakdown of "No" (did not continue) (2011) Number of cases (\%)

| Area | Another within prefecture on my own will ${ }_{1}$ | Another outside prefecture on my own will ${ }_{2}$ | Returned to hometown within prefecture $_{3}$ | Returned to hometown outside prefecture ${ }_{4}$ | Another within prefecture due to medical reasons | Another outside prefecture due to medical reasons | Number of valid responses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 54(19.4) | 163( 58.4) | 5( 1.8) | 9(3.2) | 51(18.3) | 2( 0.7) | 279 |
| Kenchu | 153(26.0) | 292( 49.7) | 7( 1.2) | 15(2.6) | 124(21.1) | 7( 1.2) | 588 |
| Kennan | 24(27.6) | 42( 48.3) | 3( 3.4) | 1(1.1) | 17(19.5) | 1( 1.1) | 87 |
| Soso | 283(43.4) | 357( 54.8) | 4( 0.6) | 10(1.5) | 29(4.4) | 8( 1.2) | 652 |
| Iwaki | 67(18.8) | 242( 67.8) | 4( 1.1) | 9(2.5) | 34( 9.5) | 12(3.4) | 357 |
| Aizu | 31(32.6) | 24(25.3) | 4(4.2) | 1(1.1) | 36(37.9) | 2( 2.1) | 95 |
| Minam <br> -Aizu | 2(33.3) | 1( 16.7) | 1(16.7) | $0(0.0)$ | 1(16.7) | 1(16.7) |  |
| Outside <br> of <br> prefecture | 0( 0.0) | 17(100.0) | O( 0.0) | O(0.0) | O( 0.0) | 0( 0.0) | 17 |
| Total | 614(29.5) | 1,138( 54.7) | 28( 1.3) | 45(2.2) | 292(14.0) | 33( 1.6) | 2,081 |

The denominator was the number of respondents (Valid responses: 2,081 ). Since there were multiple responses, the total of percentage exceeds $100 \%$.
※ Since the total number including multiple responses were used as the denominator for the result report of 2011, the figures differ from the ones obtained this time.
1 Decided to change to another facility within prefecture by one's own will, 2 Changed to another facility outside the prefecture by one's own will, 3 Returned to hometown within the prefecture from before the disaster to receive examination at a different facility, 4 Returned to hometown outside the prefecture from before the disaster to receive examination at a different facility, 5 Instructed to move (or was transported) to another facility within prefecture due to medical reasons, 6 Instructed to move (or was transported) to another facility outside the prefecture due to medical reasons.

Were you able to receive the prenatal examination this time according to the previously determined schedule?

| (2013) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid response | Total |
| Kempoku | 1,850(96.8) | 55(2.9) | $6(0.3)$ | 1,911 |
| Kenchu | 1,904(97.2) | 44(2.2) | 11(0.6) | 1,959 |
| Kennan | 574(98.5) | 7(1.2) | 2(0.3) | 583 |
| Soso | 517(97.9) | 9(1.7) | 2(0.4) | 528 |
| Iwaki | 1,156(98.2) | 15(1.3) | $6(0.5)$ | 1,177 |
| Aizu | 802(97.3) | 17(2.1) | 5(0.6) | 824 |
| Minami-Aizu | 80(96.4) | 3(3.6) | $0(0.0)$ | 83 |
| Outside of prefecture | 96(94.1) | 6(5.9) | $0(0.0)$ | 102 |
| Total | 6,979(97.4) | 156(2.2) | 32(0.4) | 7,167 |

Breakdown of "No" (I was unable to receive examination as scheduled) (2013) Number of cases (\%)

| Area | Issues with pregnancy course | No issues with pregnancy course | No response | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | 10(18.2) | 43(78.2) | 2( 3.6) | 55 |
| Kenchu | 14(31.8) | 28(63.6) | 2( 4.5) | 44 |
| Kennan | 1(14.3) | 6(85.7) | $0(0.0)$ | 7 |
| Soso | $3(33.3)$ | 6(66.7) | $0(0.0)$ | 9 |
| Iwaki | 3(20.0) | 10(66.7) | 2(13.3) | 15 |
| Aizu | 8(47.1) | 8(47.1) | 1(5.9) | 17 |
| Minami-Aizu | 1(33.3) | 2(66.7) | $0(0.0)$ | 3 |
| Outside of prefecture | 2(33.3) | 4(66.7) | $0(0.0)$ | 6 |
| Total | 42(26.9) | 107(68.6) | 7( 4.5) | 156 |


| (2012) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | No response | Total |
| Kempoku | 1,792( 97.0) | 46(2.5) | 9(0.5) | 1,847 |
| Kenchu | 1,999(97.0) | 49(2.4) | 13(0.6) | 2,061 |
| Kennan | 548( 97.9) | 9(1.6) | 3(0.5) | 560 |
| Soso | 472( 97.1) | 12(2.5) | 2(0.4) | 486 |
| Iwaki | 1,169(97.6) | 22(1.8) | 7(0.6) | 1,198 |
| Aizu | 795( 97.4) | 19(2.3) | 2(0.2) | 816 |
| Minami-Aizu | 78(100.0) | 0(0.0) | 0(0.0) | 78 |
| Outside of prefecture | 91( 97.8) | 1(1.1) | 1(1.1) | 93 |
| Total | 6,944( 97.3) | 158(2.2) | 37(0.5) | 7,139 |


| Breakdown of "No" (I was unable to receive examination as scheduled) (2012) |  |  |  | Number of cases (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Area | Issues with pregnancy course | No issues with pregnancy course | No response | Total |
| Kempoku | 9(19.6) | 36(78.3) | 1( 2.2) | 46 |
| Kenchu | 14(28.6) | 34( 69.4 ) | 1( 2.0 ) | 49 |
| Kennan | 3(33.3) | 6( 66.7) | $0(0.0)$ | 9 |
| Soso | 5(41.7) | 5( 41.7) | 2(16.7) | 12 |
| Iwaki | 7(31.8) | 15( 68.2) | $0(0.0)$ | 22 |
| Aizu | 4(21.1) | 14(73.7) | 1( 5.3) | 19 |
| Minami-Aizu | $0(0.0)$ | $0(0.0)$ | O(0.0) | 0 |
| Outside of prefecture | $0(0.0)$ | 1(100.0) | $0(0.0)$ | 1 |
| Total | 42(26.6) | 111( 70.3) | 5( 3.2) | 158 |


| Number of cases (\%) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Yes | No | Invalid response | Total |  |  |
| Kempoku | $1,849(85.4)$ | $307(14.2)$ | $9(0.4)$ | 2,165 |  |  |
| Kenchu | $2,221(82.3)$ | $453(16.8)$ | $25(0.9)$ | 2,699 |  |  |
| Kennan | $504(84.0)$ | $88(14.7)$ | $8(1.3)$ | 600 |  |  |
| Soso | $596(65.3)$ | $306(33.5)$ | $11(1.2)$ | 913 |  |  |
| Iwaki | $965(67.9)$ | $437(30.7)$ | $20(1.4)$ | 1,422 |  |  |
| Aizu | $843(92.9)$ | $53(5.8)$ | $11(1.2)$ | 907 |  |  |
| Minami-Ai <br> Zu | $79(94.0)$ | $5(6.0)$ | $0(0.0)$ | 84 |  |  |
| Outside of <br> prefecture | $15(68.2)$ | $7(31.8)$ | $0(0.0)$ | 22 |  |  |
| Total | $7,072(80.3)$ | $1,656(18.8)$ | $84(1.0)$ | 8,812 |  |  |

The breakdown of "No" (I was unable to receive examination as scheduled) (2011) Number of cases (\%)

| Area | I was unable to receive <br> examinations as <br> scheduled and was <br> hospitalized | I was unable to receive <br> examinations as <br> scheduled, but there <br> were no issues | Invalid response |
| :---: | :---: | :---: | :---: |
| Kempoku | $32(10.4)$ | $269(87.6)$ | $6(2.0)$ |
| Kenchu | $46(10.2)$ | $395(87.2)$ | $12(2.6)$ |

## 5. Household and child rearing situations

State of evacuation (Are you currently taking shelter?)

| (2013) |  |  |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Taking shelter in temporary housing | Taking shelter in some place other than temporary housing | Currently living at home | No evacuation | Invalid responses | Total |
| Kempoku | 5(0.3) | 43( 2.3) | 425(22.2) | 1,394(72.9) | 44(2.3) | 1,911 |
| Kenchu | 3(0.2) | 35( 1.8) | 544(27.8) | 1,327(67.7) | 50(2.6) | 1,959 |
| Kennan | $0(0.0)$ | 4( 0.7) | 65(11.1) | 502(86.1) | 12(2.1) | 583 |
| Soso | 41(7.8) | 228(43.2) | 165(31.3) | 87(16.5) | 7(1.3) | 528 |
| Iwaki | 2(0.2) | 23( 2.0) | 682(57.9) | 441(37.5) | 29(2.5) | 1,177 |
| Aizu | $0(0.0)$ | 9( 1.1) | $36(4.4)$ | 753(91.4) | 26(3.2) | 824 |
| Minami-Aizu | $0(0.0)$ | O( 0.0) | 5( 6.0) | $74(89.2)$ | 4(4.8) | 83 |
| Outside of prefecture | 0 (0.0) | 6( 5.9) | 5(4.9) | 87(85.3) | 4(3.9) | 102 |
| Total | 51(0.7) | 348( 4.9) | 1,927(26.9) | 4,665(65.1) | 176(2.5) | 7,167 |


| Area | Taking shelter in temporary housing | Taking shelter in some place other than temporary housing | Currently living at home | No evacuation | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 3(0.2) | 87( 4.7) | 630(34.1) | 1,115(60.4) | 12(0.6) | 1,847 |
| Kenchu | 4(0.2) | 83( 4.0) | 955(46.3) | 1,005(48.8) | 14(0.7) | 2,061 |
| Kennan | 1(0.2) | 12( 2.1) | 106(18.9) | 437(78.0) | 4(0.7) | 560 |
| Soso | 47(9.7) | 251(51.6) | 140(28.8) | 41( 8.4) | 7(1.4) | 486 |
| Iwaki | 5(0.4) | 40(3.3) | 863(72.0) | 281(23.5) | 9(0.8) | 1,198 |
| Aizu | $0(0.0)$ | 13( 1.6) | 41( 5.0) | 760(93.1) | 2(0.2) | 816 |
| Minami-Aizu | $0(0.0)$ | 1( 1.3) | 3(3.8) | 73(93.6) | 1(1.3) | 78 |
| Outside of prefecture | O(0.0) | 6( 6.5) | 9( 9.7) | 76(81.7) | 2(2.2) | 93 |
| Total | 60(0.8) | 493( 6.9) | 2,747(38.5) | 3,788(53.1) | 51(0.7) | 7,139 |

Have you ever lost confidence in child rearing?
(2013) ※Only those who have given birth

| Area | Yes | No | Cannot say | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $364(19.3)$ | $821(43.5)$ | $690(36.5)$ | $13(0.7)$ | 1,888 |
| Kenchu | $354(18.3)$ | $826(42.6)$ | $741(38.3)$ | $16(0.8)$ | 1,937 |
| Kennan | $104(18.1)$ | $277(48.2)$ | $189(32.9)$ | $5(0.9)$ | 575 |
| Soso | $92(17.7)$ | $227(43.7)$ | $198(38.1)$ | $3(0.6)$ | 520 |
| Iwaki | $159(13.7)$ | $580(50.1)$ | $407(35.1)$ | $12(1.0)$ | 1,158 |
| Aizu | $123(15.1)$ | $379(46.4)$ | $308(37.7)$ | $6(0.7)$ | 816 |
| Minami-Aizu | $18(22.0)$ | $-30(36.6)$ | $-33(40.2)$ | $1(1.2)$ | 82 |
| Outside of <br> prefecture | $27(26.5)$ | $36(35.3)$ | $39(38.2)$ | $0(0.0)$ | 102 |
| Total | $1,241(17.5)$ | $3,176(44.9)$ | $2,605(36.8)$ | $56(0.8)$ | 7,078 |

(2012) ※Only those who have given birth

Number of cases (\%)

| Area | Yes | No | Cannot say | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $302(16.7)$ | $804(44.4)$ | $682(37.6)$ | $24(1.3)$ | 1,812 |
| Kenchu | $325(16.0)$ | $902(44.4)$ | $785(38.6)$ | $21(1.0)$ | 2,033 |
| Kennan | $80(14.5)$ | $262(47.5)$ | $205(37.1)$ | $5(0.9)$ | 552 |
| Soso | $71(15.1)$ | $206(43.8)$ | $181(38.5)$ | $12(2.6)$ | 470 |
| Iwaki | $139(11.8)$ | $613(52.1)$ | $410(34.9)$ | $14(1.2)$ | 1,176 |
| Aizu | $139(17.3)$ | $368(45.8)$ | $290(36.1)$ | $7(0.9)$ | 804 |
| Minami-Aizu | $9(11.5)$ | $38(48.7)$ | $31(39.7)$ | $0(0.0)$ | 78 |
| -Outside of <br> prefecture | $19(20.4)$ | $29(31.2)$ | $43(46.2)$ | $2(2.2)$ | 93 |
| Total | $1,084(15.4)$ | $3,222(45.9)$ | $2,627(37.4)$ | $85(1.2)$ | 7,018 |

Children's nourishment methods (what is the nourishment methods of your child until now (until beginning baby food))?
(2013) ※ Only those who have given birth

Number of cases (\%)

| Area | Only breast milk | Combination of milk and breast milk | Only milk | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 740(39.2) | 1,015(53.8) | 127( 6.7) | 6(0.3) | 1,888 |
| Kenchu | 686(35.4) | 1,071(55.3) | 171( 8.8) | $9(0.5)$ | 1,937 |
| Kennan | 184(32.0) | 312(54.3) | 77(13.4) | 2(0.3) | 575 |
| Soso | 184(35.4) | 269(51.7) | 67(12.9) | $0(0.0)$ | 520 |
| Iwaki | 464(40.1) | 596(51.5) | 91( 7.9) | 7(0.6) | 1,158 |
| Aizu | 260(31.9) | 486(59.6) | 69( 8.5) | 1(0.1) | 816 |
| Minami-Aizu | 27(32.9) | 44(53.7) | 10(12.2) | 1(1.2) | 82 |
| Outside of prefecture | 42(41.2) | 56(54.9) | 4(3.9) | 0 (0.0) | 102 |
| Total | 2,587(36.5) | 3,849(54.4) | 616( 8.7) | 26(0.4) | 7,078 |

(2012) ※Only those who have given birth

Number of cases (\%)

| Area | Only breast milk | Combination of milk <br> and breast milk | Only milk | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $670(37.0)$ | $996(55.0)$ | $136(7.5)$ | $10(0.6)$ | 1,812 |
| Kenchu | $675(33.2)$ | $1,140(56.1)$ | $207(10.2)$ | $11(0.5)$ | 2,033 |
| Kennan | $158(28.6)$ | $326(59.1)$ | $67(12.1)$ | $1(0.2)$ | 552 |
| Soso | $146(31.1)$ | $257(54.7)$ | $63(13.4)$ | $4(0.9)$ | 470 |
| Iwaki | $466(39.6)$ | $603(51.3)$ | $99(8.4)$ | $8(0.7)$ | 1,176 |
| Aizu | $272(33.8)$ | $432(53.7)$ | $97(12.1)$ | $3(0.4)$ | 804 |
| Minami-Aizu | $32(41.0)$ | $35(44.9)$ | $11(14.1)$ | $0(0.0)$ | 78 |
| Outside of <br> prefecture | $50(53.8)$ | $40(43.0)$ | $1(1.1)$ | $2(2.2)$ | 93 |
| Total | $2,469(35.2)$ | $3,829(54.6)$ | $681(9.7)$ | $39(0.6)$ | 7,018 |


| Area | Only breast milk | Combination of milk and breast milk | Only milk | Invalid responses | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 689(32.4) | 1,318(62.1) | 112(5.3) | 5(0.2) | 2,124 |
| Kenchu | 759(29.0) | 1,655(63.3) | 193 (7.4) | $9(0.3)$ | 2,616 |
| Kennan | 168(28.6) | 360(61.2) | 59(10.0) | 1(0.2) | 588 |
| Soso | 241(26.9) | 549(61.2) | 100(11.1) | 7(0.8) | 897 |
| Iwaki | 484(35.0) | 822(59.4) | 74( 5.3) | $4(0.3)$ | 1,384 |
| Aizu | 238(26.8) | 594(66.9) | 55( 6.2) | 1(0.1) | 888 |
| Minami -Aizu | 33(40.2) | 45(54.9) | 4(4.9) | O(0.0) | 82 |
| Outside of prefecture | 5(22.7) | 14(63.6) | 2( 9.1) | 1(4.5) | 22 |
| Total | 2,617(30.4) | 5,357(62.3) | 599 (7.0) | 28(0.3) | 8,601 |

Reasons for using milk (for individuals who use combination of breast milk and milk as well as those who only use milk)
(2013)

Number of cases (\%)

| Area | Not enough breast milk | Concerns for effects of <br> radiation on breast milk | Other | Valid <br> responses |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $856(75.2)$ | $16(1.4)$ | $303(26.6)$ | 1,138 |
| Kenchu | $961(77.8)$ | $24(1.9)$ | $290(23.5)$ | 1,236 |
| Kennan | $305(80.1)$ | $5(1.3)$ | $80(21.0)$ | 381 |
| Soso | $229(69.0)$ | $10(3.0)$ | $106(31.9)$ | 332 |
| Iwaki | $511(75.3)$ | $16(2.4)$ | $169(24.9)$ | 679 |
| Aizu | $432(78.1)$ | $5(0.9)$ | $130(23.5)$ | 553 |
| Minami-Aizu | $39(73.6)$ | $0-7(0.0)$ | $17(32.1)$ | 53 |
| Outside of <br> prefecture | $47(78.3)$ | $0(0.0)$ | $15(25.0)$ | 60 |
| Total | $3,380(76.3)$ | $76(1.7)$ | $1,-710(25.0)$ | 4,432 |

※The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").
※Since there are multiple responses, the total of percentages does not equal $100.0 \%$.

| (2012) |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: |
| Area | Not enough breast milk | Concerns for effects of radiation on breast milk | Other | Valid responses |
| Kempoku | 884(78.7) | 43(3.8) | 238(21.2) | 1,123 |
| Kenchu | 1,022(76.4) | 113(8.4) | 291(21.7) | 1,338 |
| Kennan | 324(83.3) | 27(6.9) | 62(15.9) | 389 |
| Soso | 246(77.6) | 25(7.9) | 63(19.9) | 317 |
| Iwaki | 512(73.8) | 52(7.5) | 163(23.5) | 694 |
| Aizu | 407(78.0) | 13(2.5) | 130(24.9) | 522 |
| Minami-Aizu | 37(82.2) | 2(4.4) | 7(15.6) | 45 |
| Outside of prefecture | 31(75.6) | 1(2.4) | 10(24.4) | 41 |
| Total | 3,463(77.5) | 276(6.2) | 964(21.6) | 4,469 |

※The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").
※Since there are multiple responses, the total of percentages does not equal $100.0 \%$.
(2011)

Number of cases (\%)

| Area | Not enough breast milk | Concerns for effects of <br> radiation on breast milk | Other | Valid <br> responses |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $1,037(73.1)$ | $248(17.5)$ | $295(20.8)$ | 1,418 |
| Kenchu | $1,305(71.6)$ | $410(22.5)$ | $318(17.4)$ | 1,823 |
| Kennan | $277(66.6)$ | $113(27.2)$ | $85(20.4)$ | 416 |
| Soso | $460(71.5)$ | $150(23.3)$ | $98(15.2)$ | 643 |
| Iwaki | $619(70.0)$ | $180(20.4)$ | $188(21.3)$ | 884 |
| Aizu | $512(80.1)$ | $59(9.2)$ | $112(17.5)$ | 639 |
| Minami-Aizu | $39(79.6)$ | $6(12.2)$ | $7(14.3)$ | 49 |
| Outside of <br> prefecture | $12(75.0)$ | $1(6.3)$ | $4(25.0)$ | 16 |
| Total | $4,261(72.4)$ | $1,167(19.8)$ | $1,107(18.8)$ | 5,888 |

※The denominator is the number of valid responses (those who described "the reason for using milk" among the ones who responded "combination of milk and breast milk" or "only milk").
※Since there are multiple responses, the total percentage does not equal $100.0 \%$.
※Since the total number including multiple responses were used as the denominator for the result report of 2011, the figures differ from the ones obtained this time.

## 6. Wish for next pregnancy and requests for medical institutions

Are you considering another pregnancy/delivery?

| Area | Yes (I am <br> planning to) | No (I am not <br> planning to) | No response | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $1,005(52.6)$ | $878(45.9)$ | $28(1.5)$ | 1,911 |
| Kenchu | $1,042(53.2)$ | $884(45.1)$ | $33(1.7)$ | 1,959 |
| Kennan | $305(52.3)$ | $267(45.8)$ | $11(1.9)$ | 583 |
| Soso | $274(51.9)$ | $243(46.0)$ | $11(2.1)$ | 528 |
| Iwaki | $600(51.0)$ | $559(47.5)$ | $18(1.5)$ | 1,177 |
| Aizu | $453(55.0)$ | $363(44.1)$ | $8(1.0)$ | 824 |
| Minami-Aizu | $41(49.4)$ | $41(49.4)$ | $1(1.2)$ | 83 |
| Outside of <br> prefecture | $67(65.7)$ | $34(33.3)$ | $1(1.0)$ | 102 |
| Total | $3,787(52.8)$ | $3,269(45.6)$ | $111(1.5)$ | 7,167 |

Services desired by those who answered "considering another pregnancy"
Number of cases (\%)

| Area | Improvement of <br> system | Expansion of <br> childcare services | Information and <br> services | Radiation <br> information | Other | Valid <br> responses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $572(59.0)$ | $701(72.3)$ | $628(64.7)$ | $393(40.5)$ | $107(11.0)$ | 970 |
| Kenchu | $582(58.6)$ | $717(72.1)$ | $626(63.0)$ | $438(44.1)$ | $107(10.8)$ | 994 |
| Kennan | $159(53.5)$ | $197(66.3)$ | $204(68.7)$ | $111(37.4)$ | $20(6.7)$ | 297 |
| Soso | $116(44.8)$ | $160(61.8)$ | $195(75.3)$ | $119(45.9)$ | $29(11.2)$ | 259 |
| Iwaki | $322(55.4)$ | $406(69.9)$ | $398(68.5)$ | $256(44.1)$ | $56(9.6)$ | 581 |
| Aizu | $256(59.4)$ | $303(70.3)$ | $283(65.7)$ | $144(33.4)$ | $47(10.9)$ | 431 |
| Minami-Aizu | $16(42.1)$ | $18(47.4)$ | $27(71.1)$ | $13(34.2)$ | $4(10.5)$ | 38 |
| Outside of <br> prefecture | $37(56.1)$ | $49(74.2)$ | $45(68.2)$ | $24(36.4)$ | $10(15.2)$ | 66 |
| Total | $2,060(56.7)$ | $2,551(70.2)$ | $2,406(66.2)$ | $1,498(41.2)$ | $380(10.5)$ | 3,636 |

※The denominator is the number of valid responses (those who have answered "yes" for the question about wish for another pregnancy and provided answers to "services that you would want related to next pregnancy/delivery."). Since there are multiple responses, the total of percentages does not equal 100.0\%.

| Area | I simply don't wish to | Unstable income | Absence of people who would provide help | No facilities (day care center, etc.) | Currently occupied with child(ren) | Evacuation life |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 412(47.1) | 187(21.4) | 91(10.4) | 54(6.2) | 311(35.5) | 5(0.6) |
| Kenchu | 453(51.3) | 213(24.1) | 99(11.2) | 71(8.0) | 341(38.6) | 1(0.1) |
| Kennan | 152(57.6) | 59(22.3) | 25(9.5) | 15(5.7) | 87(33.0) | $0(0.0)$ |
| Sousou | 116(47.9) | 43(17.8) | 22(9.1) | 19(7.9) | 90(37.2) | 22(9.1) |
| Iwaki | 277(49.9) | 120(21.6) | 52( 9.4) | 23(4.1) | 191(34.4) | 4(0.7) |
| Aizu | 185(51.2) | 74(20.5) | 32(8.9) | 26(7.2) | 128(35.5) | $0(0.0)$ |
| Minami-Aizu | 18(43.9) | 12(29.3) | 4( 9.8) | 2(4.9) | 11(26.8) | $0(0.0)$ |
| Outside of prefecture | 16(47.1) | 4(11.8) | 5(14.7) | 2(5.9) | 8(23.5) | $0(0.0)$ |
| Total | 1,629(50.0) | 712(21.9) | 330(10.1) | 212(6.5) | 1,167(35.9) | 32(1.0) |


| Area | Dispersed family <br> members | Age and health | Effects of radiation | Other | Valid responses |
| :---: | :---: | :---: | :---: | :---: | ---: |
| Kempoku | $13(1.5)$ | $311(35.5)$ | $38(4.3)$ | $143(16.3)$ | 875 |
| Kenchu | $15(1.7)$ | $283(32.0)$ | $64(7.2)$ | $119(13.5)$ | 883 |
| Kennan | $5(1.9)$ | $82(31.1)$ | $22(8.3)$ | $39(14.8)$ | 264 |
| Soso | $10(4.1)$ | $85(35.1)$ | $19(7.9)$ | $35(14.5)$ | 242 |
| Iwaki | $8(1.4)$ | $177(31.9)$ | $28(5.0)$ | $93(16.8)$ | 555 |
| Aizu | $4(1.1)$ | $114(31.6)$ | $8(2.2)$ | $51(14.1)$ | 361 |
| Minami-Aizu | $0(0.0)$ | $11(26.8)$ | $1(2.4)$ | $9(22.0)$ | $4(11.8)$ |
| Outside of <br> prefecture | $3(8.8)$ | $9(26.5)$ | $2(5.9)$ | 41 |  |
| Total | $58(1.8)$ | $1,072(32.9)$ | $182(5.6)$ | $493(15.1)$ | 34 |

※The denominator is the number of valid responses (those who answered "no" and provided a "reason for not considering another pregnancy"). Since there are multiple responses, the total of percentages does not equal $100.0 \%$.
(2012) Number of cases (\%)

| Area | Yes (I am <br> planning to) | No (I am not <br> planning to) | No response | Total |
| :---: | :---: | :---: | :---: | :---: |
| Kempoku | $990(53.6)$ | $825(44.7)$ | $32(1.7)$ | 1,847 |
| Kenchu | $1,100(53.4)$ | $926(44.9)$ | $35(1.7)$ | 2,061 |
| Kennan | $286(51.1)$ | $267(47.7)$ | $7(1.3)$ | 560 |
| Soso | $244(50.2)$ | $232(47.7)$ | $10(2.1)$ | 486 |
| Iwaki | $617(51.5)$ | $555(46.3)$ | $26(2.2)$ | 1,198 |
| Aizu | $439(53.8)$ | $364(44.6)$ | $13(1.6)$ | 816 |
| Minami-Aizu | $40(51.3)$ | $37(47.4)$ | $1(1.3)$ | 78 |
| Outside of <br> prefecture | $59(63.4)$ | $33(35.5)$ | $1(1.1)$ | 93 |
| Total | $3,775(52.9)$ | $3,239(45.4)$ | $125(1.8)$ | 7,139 |

Services desired by those who answered "considering another pregnancy"
Number of cases (\%)

| Area | Improvement of <br> system | Expansion of <br> childcare services | Information and <br> services | Radiation <br> information | Other | Valid <br> responses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $499(52.0)$ | $639(66.6)$ | $657(68.5)$ | $577(60.2)$ | $58(6.0)$ | 959 |
| Kenchu | $551(50.9)$ | $738(68.1)$ | $781(72.1)$ | $700(64.6)$ | $78(7.2)$ | 1,083 |
| Kennan | $146(53.1)$ | $180(65.5)$ | $189(68.7)$ | $167(60.7)$ | $23(8.4)$ | 275 |
| Soso | $98(41.2)$ | $135(56.7)$ | $186(78.2)$ | $146(61.3)$ | $15(6.3)$ | 238 |
| Iwaki | $308(50.7)$ | $385(63.4)$ | $451(74.3)$ | $389(64.1)$ | $37(6.1)$ | 607 |
| Aizu | $241(57.0)$ | $304(71.9)$ | $277(65.5)$ | $203(48.0)$ | $27(6.4)$ | 423 |
| Minami-Aizu | $18(46.2)$ | $-18(46.2)$ | $32(82.1)$ | $12(30.8)$ | $8(20.5)$ | 39 |
| -Outside of <br> prefecture | $32(56.1)$ | $36(63.2)$ | $40(70.2)$ | $26(45.6)$ | $1(1.8)$ | 57 |
| Total | $1,893(51.4)$ | $2,435(66.2)$ | $2,613(71.0)$ | $2,220(60.3)$ | $247(6.7)$ | 3,681 |

※The denominator is the number of valid responses (those who have answered "yes" and provided answers to "services that you would want related to next pregnancy/delivery"). Since there are multiple responses, the total of percentages does not equal 100.0\%.

Reasons for not considering another pregnancy
Number of cases (\%)

| Area | I simply don't wish to | Unstable income | Absence of people who would provide help | No facilities (day care center, etc.) | Currently occupied with child(ren) | Evacuation life |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 421(51.2) | 193(23.5) | 73( 8.9) | 40( 4.9) | 277(33.7) | 6( 0.7) |
| Kenchu | 489(53.4) | 260(28.4) | 102(11.1) | 84( 9.2) | 346(37.8) | 9( 1.0$)$ |
| Kennan | 160(59.9) | 59(22.1) | 25( 9.4) | 14( 5.2) | 74(27.7) | 1( 0.4) |
| Soso | 112(48.7) | 59(25.7) | 24(10.4) | 14( 6.1) | 100(43.5) | 56(24.3) |
| Iwaki | 282(51.4) | 149(27.1) | 41( 7.5) | 36( 6.6) | 187(34.1) | 3( 0.5) |
| Aizu | 184(51.4) | 91(25.4) | 39(10.9) | 28( 7.8) | 143(39.9) | 2( 0.6) |
| Minami-Aizu | 21(56.8) | 10(27.0) | 3(8.1) | 1(2.7) | 15(40.5) | 0(0.0) |
| Outside of prefecture | 21(63.6) | 7(21.2) | 3( 9.1) | 5(15.2) | 11(33.3) | 1( 3.0) |
| Total | 1,690(52.6) | 828(25.8) | 310(9.7) | 222( 6.9) | 1,153(35.9) | 78( 2.4) |


| Area | Dispersed family <br> members | Age and health | Effects of radiation | Other | Valid responses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | $15(1.8)$ | $297(36.1)$ | $103(12.5)$ | $15(1.8)$ | 822 |
| Kenchu | $19(2.1)$ | $274(29.9)$ | $193(21.1)$ | $23(2.5)$ | 916 |
| Kennan | $4(1.5)$ | $87(32.6)$ | $34(12.7)$ | $6(2.2)$ | 267 |
| Soso | $21(9.1)$ | $61(26.5)$ | $37(16.1)$ | $4(1.7)$ | 230 |
| Iwaki | $8(1.5)$ | $181(33.0)$ | $78(14.2)$ | $17(3.1)$ | 549 |
| Aizu | $9(2.5)$ | $99(27.7)$ | $27(7.5)$ | $10(2.8)$ | $4(10.8)$ |
| Minami-Aizu | $0(0.0)$ | $10(27.0)$ | $2(5.4)$ | $2(6.1)$ | 37 |
| Outside of <br> prefecture | $2(6.1)$ | $3(9.1)$ | $1(3.0)$ | 37 |  |
| Total | $78(2.4)$ | $1,012(31.5)$ | $475(14.8)$ | $81(2.5)$ | 33 |

※The denominator is the number of valid responses (those who answered "no" and provided a "reason for not considering another pregnancy"). Since there are multiple responses, the total of percentage does not equal $100.0 \%$.

## 7. Phone support situation

| (2013) |  |  | People (\%) |
| :---: | :---: | :---: | :---: |
| Area | Mental care support | Support by free entry contents | Number of people who require support |
| Kempoku | 202 (70.1) | 86 (29.9) | 288 |
| Kenchu | 190 (64.0) | 107 (36.0) | 297 |
| Kennan | 62 (68.9) | 28 (31.1) | 90 |
| Soso | 67 (75.3) | 22 (24.7) | 89 |
| Iwaki | 113 (66.1) | 58 (33.9) | 171 |
| Aizu | 83 (67.5) | 40 (32.5) | 123 |
| Minami -Aizu | 13 (76.5) | 4 (23.5) | 17 |
| Outside of prefecture | 11 (47.8) | 12 (52.2) | 23 |
| Total | 741 (67.5) | 357 (32.5) | 1,098 |
| (2012) |  |  | People (\%) |
| Area $\quad$ Mental care supp |  | Support by free entry contents | Number of people who require support |
| Kempoku | 188 (67.6) | 90 (32.4) | 278 |
| Kenchu | 227 (67.0) | 112 (33.0) | 339 |
| Kennan | 47 (65.3) | 25 (34.7) | 72 |
| Soso | 71 (75.5) | 23 (24.5) | 94 |
| Iwaki | 112 (65.9) | 58 (34.1) | 170 |
| Aizu | 95 (71.4) | 38 (28.6) | 133 |
| Minami-Aizu | u | 3 (33.3) | 9 |
| Outside of prefecture | 5 (55.6) | 4 (44.4) | 9 |
| Total | 751 (68.0) | 353 (32.0) | 1,104 |
| (2011) |  |  | People (\%) |
| Area | Mental care support | Support by free entry contents | Number of people who require support |
| Kempoku | 314 (90.0) | 35 (10.0) | 349 |
| Kenchu | 361 (87.8) | 50 (12.2) | 411 |
| Kennan | 81 (82.7) | 17 (17.3) | 98 |
| Soso | 175 (84.5) | 32 (15.5) | 207 |
| Iwaki | 192 (87.7) | 27 (12.3) | 219 |
| Aizu | 95 (87.2) | 14 (12.8) | 109 |
| Minami-Aizu | u | 1 (50.0) | 2 |
| Outside of prefecture | 5 (83.3) | 1 (16.7) | 6 |
| Total | 1,224 (87.4) | 177 (12.6) | 1,401 |

Ratios of principal topics for consultation

| (2013) |  |  |  |  |  | Number of cases (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Mattessregardingthe impactandconcem of radiation | Mattersegarding mother'smentaland physicalstate | Mattessregarding childreaning(daily life) | Mattessregarding child(ren)'smentaland physicalstate | Mattessregarding evacuationifie | Mattessregarding domesticife | Oher | $\begin{array}{\|l\|} \hline \text { Numbe } \\ \text { r of } \\ \text { people } \\ \text { who } \\ \text { require } \\ \text { support } \end{array}$ |
| Kempoku | 41 (14.2) | 133 (46.2) | 133 (46.2) | 56 (19.4) | 6 (2.1) | 60 (20.8) | 89 (30.9) | 288 |
| Kenchu | 62 (20.9) | 107 (36.0) | 105 (35.4) | 63 (21.2) | 1 (0.3) | 67 (22.6) | 102 (34.3) | 297 |
| Kennan | 19 (21.1) | 48 (53.3) | 33 (36.7) | 18 (20.0) | 2 (2.2) | 24 (26.7) | 19 (21.1) | 90 |
| Soso | 14 (15.7) | 41 (46.1) | 37 (41.6) | 19 (21.3) | $\begin{aligned} & 11( \\ & \quad 12.4) \end{aligned}$ | 17 (19.1) | 26 (29.2) | 89 |
| Iwaki | 32 (18.7) | 69 (40.4) | 53 (31.0) | 35 (20.5) | 3 (1.8) | 25 (14.6) | 69 (40.4) | 171 |
| Aizu | 13 (10.6) | 51 (41.5) | 43 (35.0) | 26 (21.1) | 0 (0.0) | 20 (16.3) | 46 (37.4) | 123 |
| $\begin{gathered} \text { Minami-Aiz } \\ u \end{gathered}$ | 3 (17.6) | 9 (52.9) | 8 (47.1) | 2 (11.8) | 0 (0.0) | 2 (11.8) | 5 (29.4) | 17 |
| Outside of prefecture | 4 (17.4) | 8 (34.8) | 14 (60.9) | 4 (17.4) | 0 ( 0.0) | 3 (13.0) | 5 (21.7) | 23 |
| Total | 188 (17.1) | 466 (42.4) | 426 (38.8) | 223 (20.3) | 23 ( 2.1) | 218 (19.9) | 361 (32.9) | 1,098 |

※The denominator is the number of valid responses (number of people who require support. Since there are multiple responses, the total of percentages does not equal $100.0 \%$.
(2012)

| Area | Mattessregardingthe impactandconcem of radiation | Mattersregarding mother'smentaland physicalstate | Mattessregarding childreaing (daily <br> life) | Mattessregarding child(ren)'smentaland physicalstate | Mattessregarding evacuationifie | Mattessregarding domesticlife | Oher | Numbe <br> r of <br> people <br> who <br> require <br> support |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kempoku | 70 (25.2) | 92 (33.1) | 92 (33.1) | 32 (11.5) | 5 (1.8) | 27 (9.7) | 74 (26.6) | 278 |
| Kenchu | 83 (24.5) | 105 (31.0) | 79 (23.3) | 44 (13.0) | 9 (2.7) | 43 (12.7) | 101 (29.8) | 339 |
| Kennan | 19 (26.4) | 27 (37.5) | 20 (27.8) | 11 (15.3) | 1 (1.4) | 10 (13.9) | 22 (30.6) | 72 |
| Soso | 15 (16.0) | 28 (29.8) | 21 (22.3) | 14 (14.9) | 6 (6.4) | 6 ( 6.4) | 34 (36.2) | 94 |
| Iwaki | 47 (27.6) | 65 (38.2) | 47 (27.6) | 29 (17.1) | 0 (0.0) | 14 ( 8.2) | 48 (28.2) | 170 |
| Aizu | 24 (18.0) | 47 (35.3) | 30 (22.6) | 16 (12.0) | 0 (0.0) | 9 (6.8) | 48 (36.1) | 133 |
| $\begin{gathered} \text { Minami-Aiz } \\ \mathrm{u} \end{gathered}$ | 1 (11.1) | 4 (44.4) | 4 (44.4) | 2 (22.2) | 0 (0.0) | 4 (44.4) | 2 (22.2) | 9 |
| Outside of prefecture | 3 (33.3) | 1 (11.1) | 2 (22.2) | 0 ( 0.0) | 0 (0.0) | 1 (11.1) | 5 (55.6) | 9 |
| Total | 262 (23.7) | 369 (33.4) | 295 (26.7) | 148 (13.4) | 21 (1.9) | 114 (10.3) | 334 (30.3) | 1,104 |

※The denominator is the number of valid responses (number of people who require support. Since there are multiple responses, the total of percentages does not equal $100.0 \%$.

| (2011) |  |  |  |  |  |  | Number of cases (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Area | Mattess regarding the impactandconcem of radiation | Mattessregarding mothe'smentaland physicalstate | Mattes regarding childrearing (daily life) | Mattess regarding child(ren)'smentaland phsicalstate | Mattessregarding evacuationlife | Mattessregarding domesticlife | Oher | Number <br> of <br> people <br> who <br> require <br> support |
| Kempoku | 113 (32.4) | 70 (20.1) | 67 (19.2) | 30 ( 8.6) | 32 (9.2) | 15 (4.3) | 120 (34.4) | 349 |
| Kenchu | 129 (31.4) | 79 (19.2) | 49 (11.9) | 41 (10.0) | 39 (9.5) | 20 (4.9) | 144 (35.0) | 411 |
| Kennan | 31 (31.6) | 12 (12.2) | 12 (12.2) | 12 (12.2) | 2 ( 2.0) | 4 (4.1) | 41 (41.8) | 98 |
| Soso | 45 (21.7) | 45 (21.7) | 26 (12.6) | 24 (11.6) | 45 (21.7) | 14 (6.8) | 73 (35.3) | 207 |
| Iwaki | 62 (28.3) | 49 (22.4) | 33 (15.1) | 27 (12.3) | 11 ( 5.0) | 10 (4.6) | 83 (37.9) | 219 |
| Aizu | 28 (25.7) | 25 (22.9) | 9 (8.3) | 12 (11.0) | 1 ( 0.9) | 6 (5.5) | 45 (41.3) | 109 |
| MinamiAizu | 0 ( 0.0) | 1 (50.0) | 0 ( 0.0) | 0 ( 0.0) | 0 ( 0.0) | 0 (0.0) | 1 (50.0) | 2 |
| Outside of prefecture | 1 (16.7) | 2 (33.3) | 0 ( 0.0) | 1 (16.7) | 0 ( 0.0) | 0 (0.0) | 2 (33.3) | 6 |
| Total | 409 (29.2) | 283 (20.2) | 196 (14.0) | 147 (10.5) | 130 ( 9.3) | 69 (4.9) | 509 (36.3) | 1,401 |

※The denominator is the number of valid responses (number of people who require support). Since there are multiple responses, the total of percentages does not equal $100.0 \%$.
※Since the denominator was the total number including multiple responses for the 2011 result report, the figures differ from the ones obtained this time.

## 8. Free entry

Breakdown of topics
(2013)

7,167 Respondents, 861 free entries (12.0\%)
(2012)

7,139 Respondents, 1,481 free entries (20.7\%)

| Opinions/complaints about this survey | Cases (\%) |
| :--- | :---: |
| The impact of radiation on the fetus/child | $146(17.0)$ |
| Bad physical condition | $112(13.0)$ |
| Child-rearing consultation (Baby food, how to make |  |
| them play, how to interact) | $97(11.3)$ |
| Requests for distributing information regarding radiation and | $80(9.3)$ |

publication of research results. $\quad$ Improving medical service and requests regarding physical 66 ( 7.7)
care

| Complaints of their own mental issues | $64(7.4)$ |
| :--- | :--- |
| Impact of radiation on baby food/food | $61(7.1)$ |

Concerns regarding the impact of radiation on water 53 ( 6.2)

Requests regarding the improvement of child-rearing 46 ( 5.3) support service

| Concerns of radiation while going/playing outside | 43 ( 5.0 ) |
| :--- | :--- | :--- |
| Concerns and complaints regarding insufficient | 43 ( 5.0) |

medical service

| Approval of this study | $35(4.1)$ |
| :--- | :--- |
| Concerns and complaints regarding the | $28(3.3)$ |

reliability/insufficiency of information

| Request regarding overall test/health examination | 27 ( 3.1) |
| :--- | :---: |
| Requests for decontamination/playgrounds | 23 ( 2.7) |
| Human relations (workplace, household, etc.) | \%* |
| Related to the outcome of this pregnancy | $22(2.6)$ |


| The impact of radiation on breast milk/milk | $20(2.3)$ |
| :--- | :---: |
| Concerns and complaints regarding family | $19(2.2)$ |


| Matters regarding economic concern/burden | 19 ( 2.2) |
| :---: | :---: |
| Requests for thyroid tests | 13 ( 1.5) |
| Requests for economic support | 12 ( 1.4) |
| Requests regarding internal exposure (whole body counter, etc.) test | 9 ( 1.0) |
| Requests for mental care and improving consulting service | 9 ( 1.0) |
| Concerns of impact of radiation on next pregnancy | 8 ( 0.9) |
| Request for health exam/checkup | 8 (0.9) |
| Requests for breast milk test | 6 ( 0.7) |
| Requests for Fukushima Health Management Survey | 4 ( 0.5) |
| Matters regarding external exposure (distributing radiation-monitoring badges, dosimeters, etc.) | 4 ( 0.5) |
| Requests for support through resources/gasoline | 3 (0.3) |


|  | Cases (\%) |
| :---: | :---: |
| The impact of radiation on the fetus/child | 391 (26.4) |
| Requests for distributing information regarding radiation and publication of research results | 191 (12.9) |
| Opinions/complaints about this study | 156 (10.5) |
| Impact of radiation on baby food/food | 140 ( 9.5) |
| Impact of radiation on water | 112 ( 7.6) |
| Concerns of radiation while going/playing outside | 112 ( 7.6) |
| Bad physical condition ** | 78 ( 5.3) |
| Concerns and complaints regarding family separation/evacuation | 64 ( 4.3) |
| Concerns and complaints regarding the reliability/insufficiency of information | 60 ( 4.1) |
| Request for health exam/checkup | 58 ( 3.9) |
| Requests for Fukushima Health Management Survey | 56 ( 3.8) |
| Request regarding overall test/health examination | 54 ( 3.6) |
| The impact of radiation on breast milk/milk | 53 ( 3.6) |
| Child-rearing consultation $* *$ | 52 ( 3.5) |
| Requests for decontamination/playgrounds | 48 ( 3.2) |
| Requests for thyroid tests | 47 ( 3.2) |
| Requests regarding internal exposure (whole body counter, etc.) test | 46 ( 3.1) |
| Requests regarding the improvement of child rearing support service | 44 ( 3.0) |
| Concerns and complaints regarding insufficient medical service | 43 ( 2.9) |
| Improving medical service and requests regarding physical care | 37 ( 2.5) |
| Related to the outcome of this pregnancy | 36 ( 2.4) |
| Approval of this study | 33 ( 2.2) |
| Complaints of their own mental issues | 28 ( 1.9) |
| Concerns of impact of radiation on next pregnancy | 24 ( 1.6) |
| Matters regarding economic concern/burden | 23 ( 1.6) |
| Requests for economic support | 23 ( 1.6) |
| Requests for mental care and improving consulting service | 18 ( 1.2) |
| Requests for breast milk test | 18 ( 1.2) |
| Matters regarding external exposure (distributing radiation-monitoring badges, dosimeters, etc.) | 7 ( 0.5) |
| Requests regarding evacuation support | 4 ( 0.3) |
| Requests for support through resources/gasoline | 3 ( 0.2) |


| Requests regarding evacuation support | 2 ( 0.2) | Requests for urine analysis | 3 (0.2) |
| :---: | :---: | :---: | :---: |
| Concerns and complaints regarding insufficient resources | 0 ( 0.0) | Concerns and complaints regarding insufficient resources | 0 (0.0) |
| Requests for urine analysis | 0 ( 0.0) | Entry out of category | 222 (15.0) |
| Entry out of category | 115 (13.4) |  |  |

※The denominator of the ratio of the entered contents were the number of people who provided some answer in free entries. Includes multiple responses.
***Contents that were not found in the 2011/2012 study

## Breakdown of topics

(2011)

8,812 respondents, 3,722 free entries ( $42.2 \%$ )

Cases (\%)

|  | Cases ( |
| :---: | :---: |
| The impact of radiation on the fetus/child | 1,102 (29.6) |
| Requests for distributing information regarding radiation and publication of research results | 725 (19.5) |
| The impact of radiation on breast milk/milk | 668 (17.9) |
| Concerns and complaints regarding the reliability/insufficiency of information | 542 (14.6) |
| Concerns and complaints regarding family separation/evacuation | 506 (13.6) |
| Impact of radiation on baby food/food | 476 (12.8) |
| Concerns regarding the impact of radiation on water | 441 (11.8) |
| Requests for breast milk test | 425 (11.4) |
| Request regarding overall test/health examination | 416 (11.2) |
| Concerns of radiation while going/playing outside | 382 (10.3) |
| Requests for economic support | 363 (9.8) |
| Opinions/complaints for this study | 359 ( 9.6) |
| Concerns and complaints regarding insufficient medical service | 348 ( 9.3) |
| Requests regarding internal exposure (whole body counter, etc.) test | 305 ( 8.2) |
| Requests for support through resources/gasoline | 275 ( 7.4) |
| Concerns and complaints regarding insufficient resources | 244 ( 6.6) |
| Requests for decontamination/playgrounds | 238 ( 6.4) |
| Matters regarding economic concern/burden | 237 ( 6.4) |
| Request for health exam/checkup | 227 ( 6.1) |
| Requests for Fukushima Health Management Survey | 215 ( 5.8) |
| Complaints of their own mental issues | 211 (5.7) |
| Improving medical service and requests regarding physical care | 173 ( 4.6) |
| Related to the outcome of this pregnancy | 159 ( 4.3) |
| Matters regarding external exposure (distributio..................... dosimeter, etc.) | 125 ( 3.4) |
| Concerns of impact of radiation on next pregnancy | 112 ( 3.0) |
| Requests for thyroid tests | 109 ( 2.9) |
| Requests for mental care and improving consulting service | 78 ( 2.1) |
| Approval of this study | 78 ( 2.1) |
| Requests regarding evacuation support | 74 ( 2.0) |

**Contents that were not found in the 2011 study

Child rearing consultation (Baby food, how to play, how to interact)

| Requests for urine analysis | $16(0.4)$ |
| :--- | :--- |
| Entry out of category | $201(5.4)$ |

※The denominator of the ratio of the entry contents are the number of people who included free entries Includes multiple choices.



[^0]:    Percentages have been rounded and may not total to $100 \%$.

[^1]:    * Including districts of FY 2012

[^2]:    *Including districts of FY 2012

[^3]:    * Including districts of FY 2012

[^4]:    ＊Iitate（May 16－），Tamura（May 28－），Katsurao（Jun 7，8），Kawamata（Jun 19－），Minamisoma（Jul 7－），Hirono（Jul 15－），Kawauchi（Sep 1－）， Futaba（Sep 6－），Namie（Sep 20－），Naraha（Sep 26－），Tomioka（Sep 29－），Okuma（Oct 20－）

[^5]:    Number of individuals

[^6]:    * Among these, 338 individuals answered that they "are not currently attending hospital as outpatient

